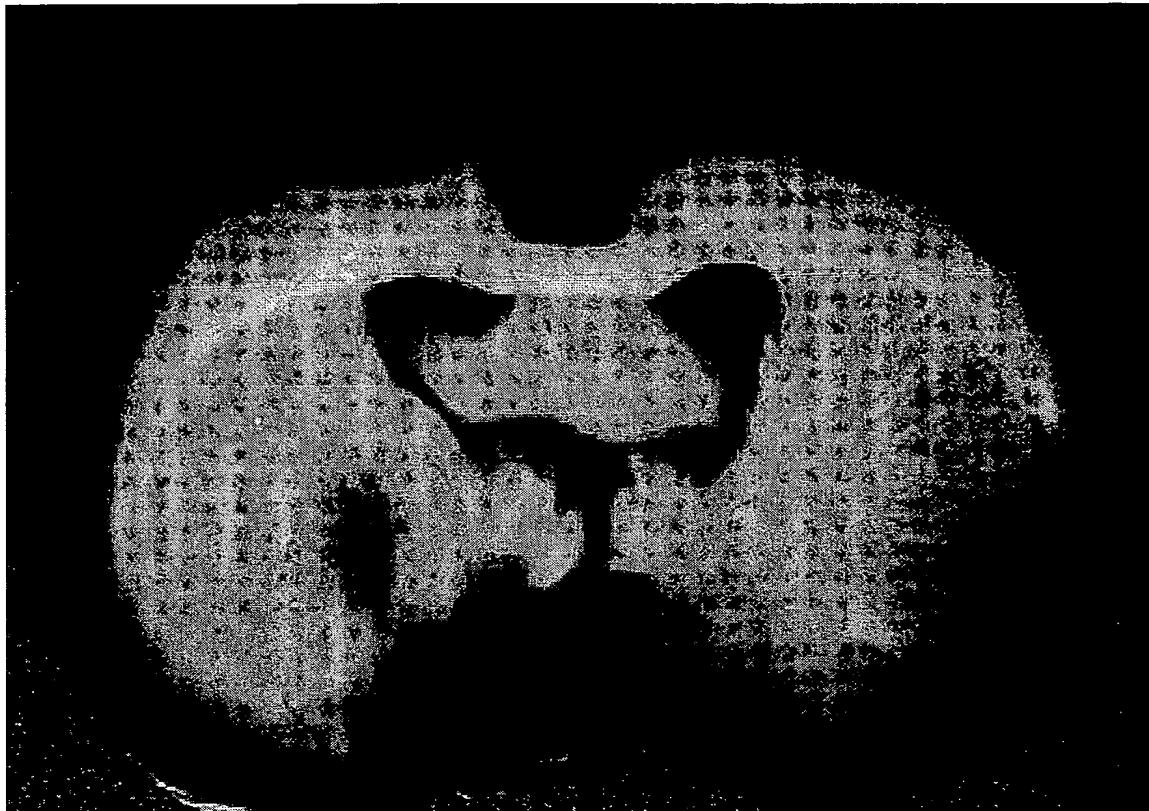


Title: INTERNALLY ADMINISTERED THERAPEUTIC AGENTS FOR
CRANIAL NERVE DISEASES COMPRISING MESENCHYMAL CELLS
AS AN ACTIVE INGREDIENT (As Amended)
Inventor(s): Osamu HONMOU et al.
DOCKET NO.: 033873-0108

1 / 5 6

FIG. 1



BEST AVAILABLE COPY

FIG. 2

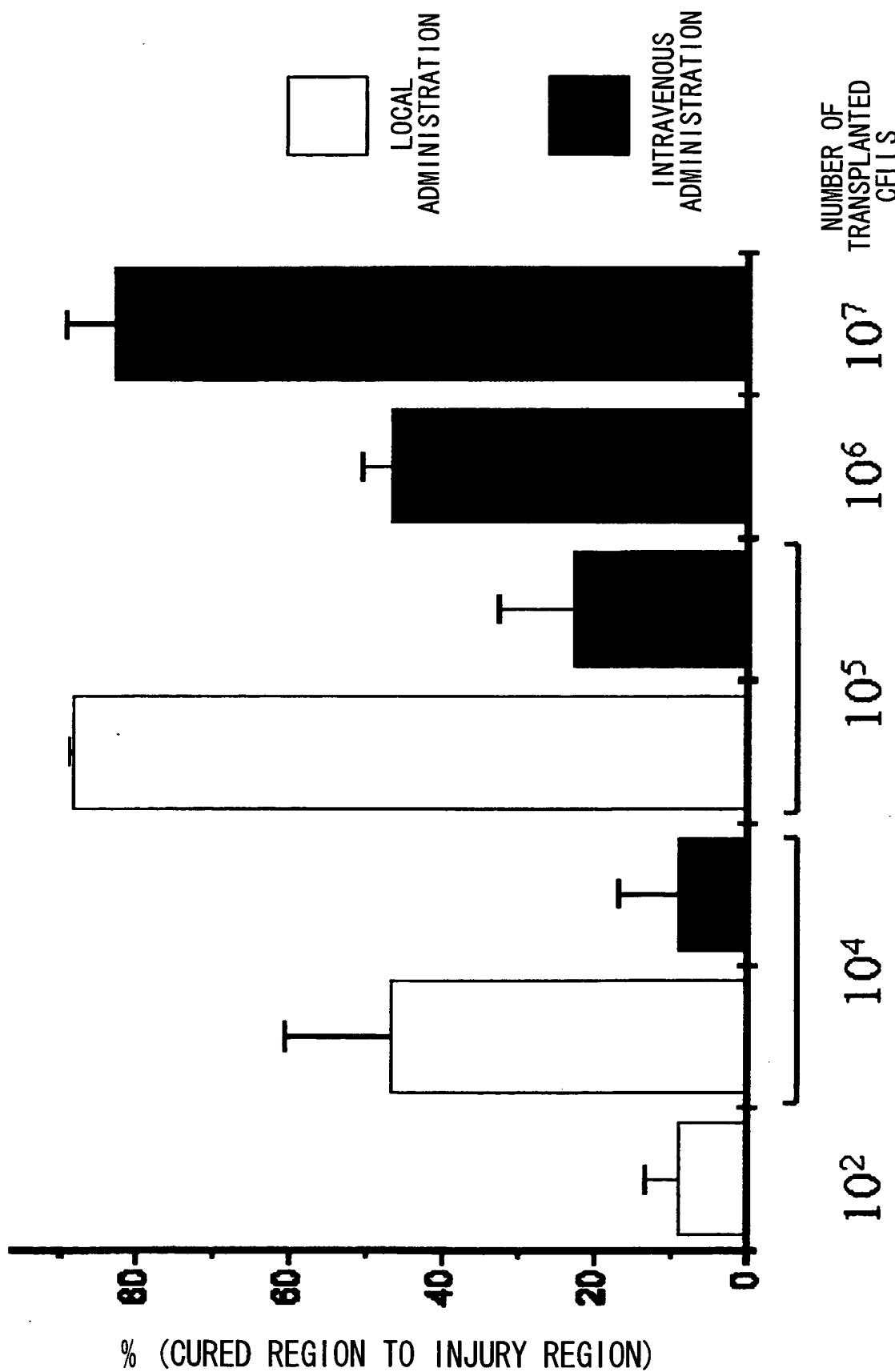
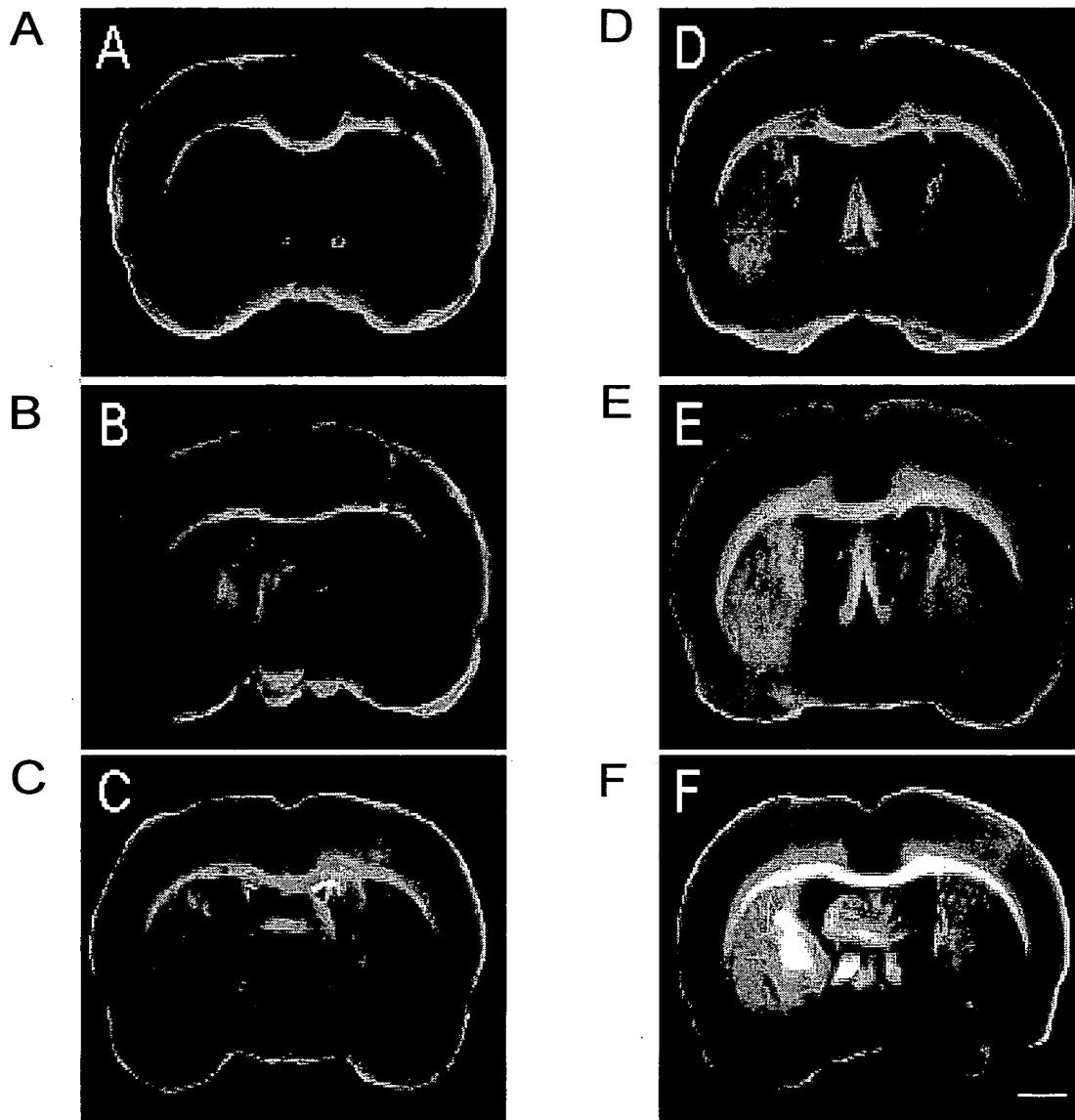
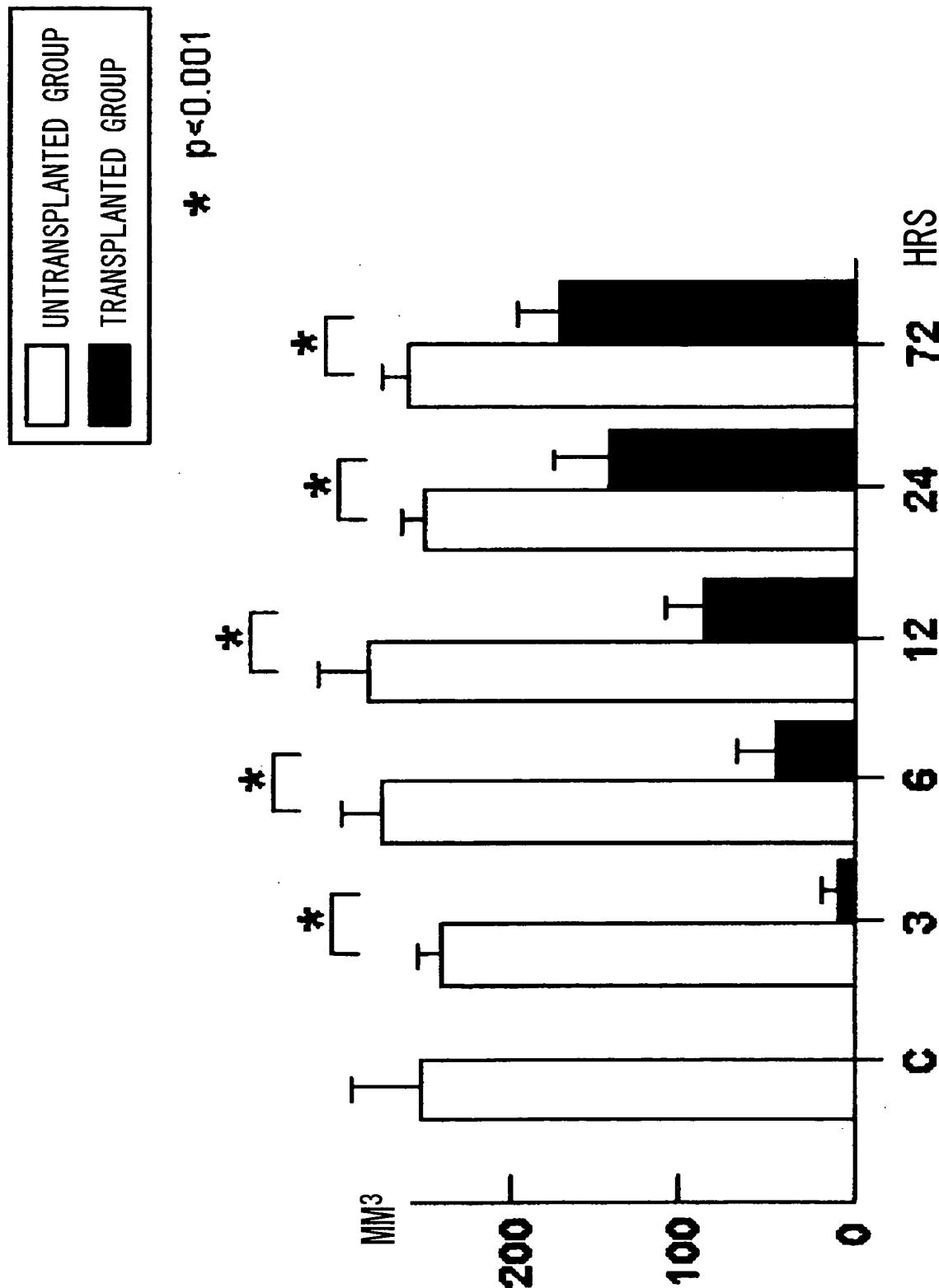


FIG. 3



BEST AVAILABLE COPY

FIG. 4

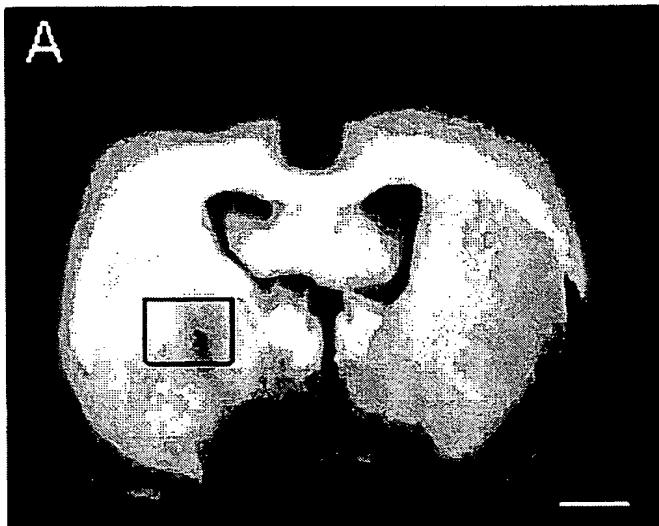


5 / 5 6

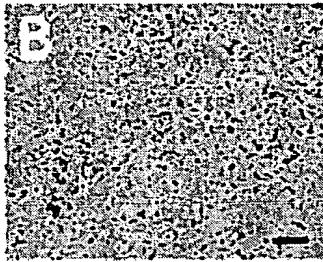
FIG. 5



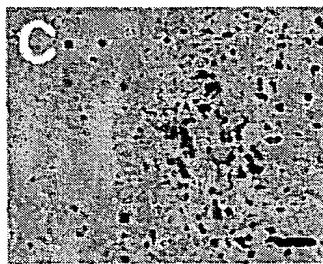
A



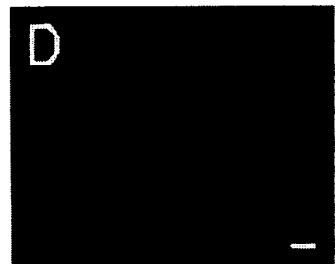
B



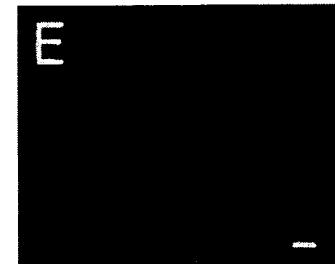
C



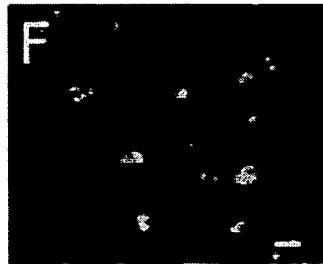
D



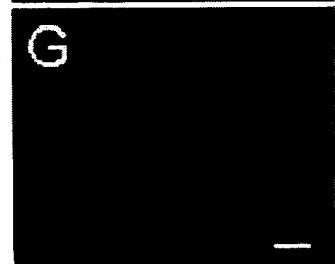
E



F



G



H



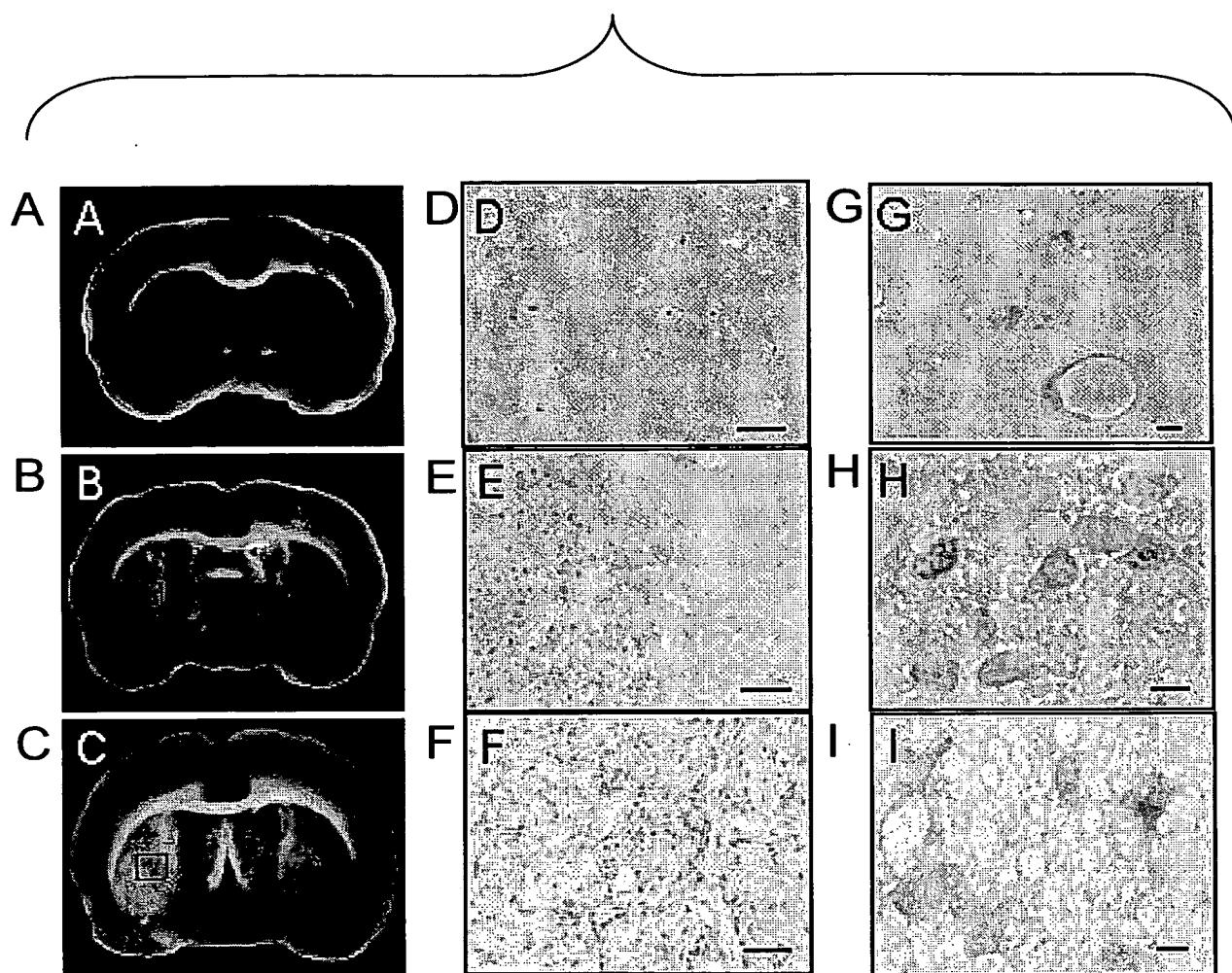
I



BEST AVAILABLE COPY

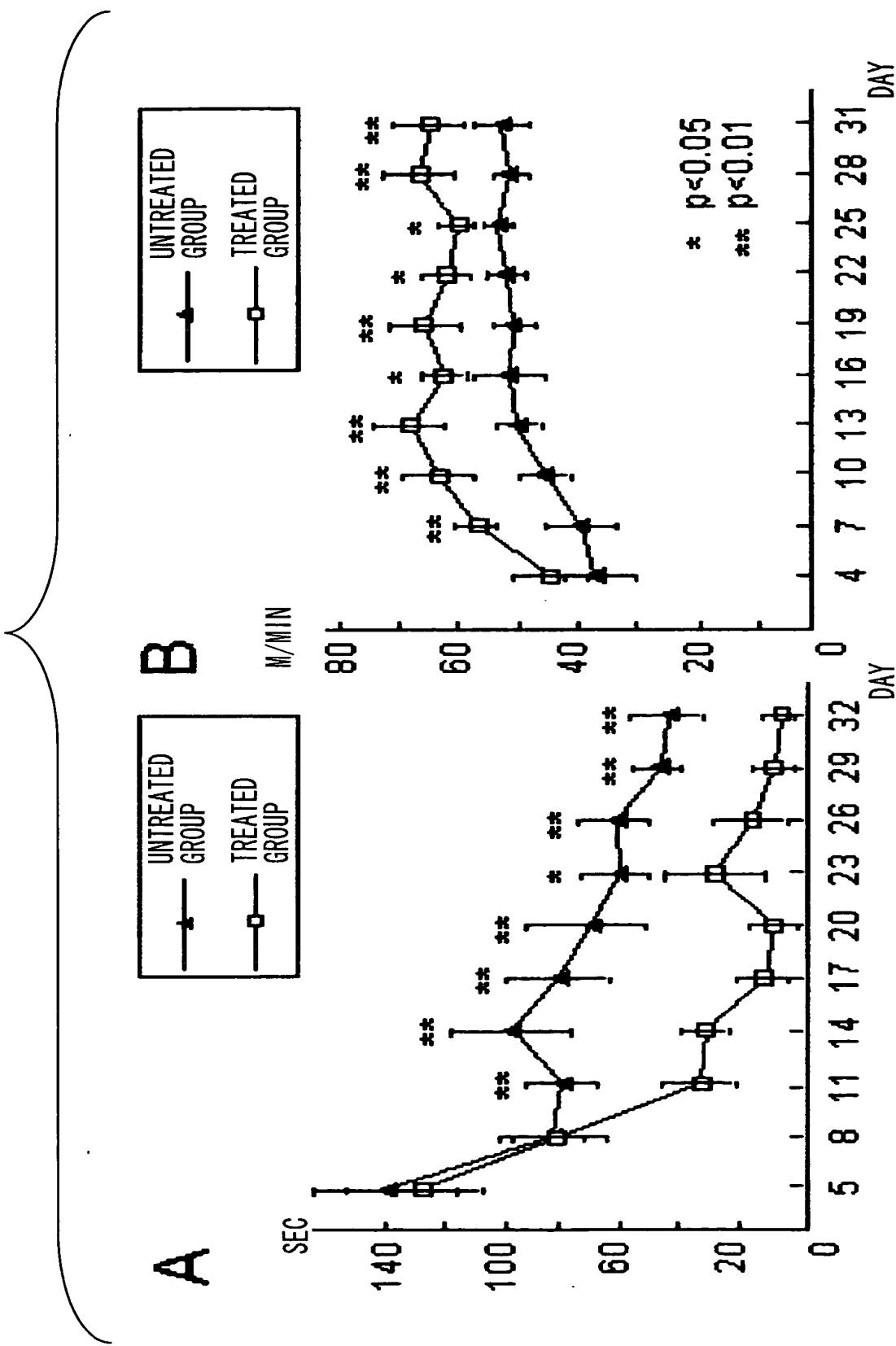
6 / 56

FIG. 6



BEST AVAILABLE COPY

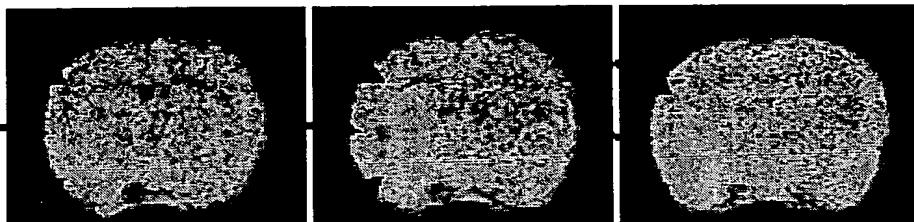
FIG. 7



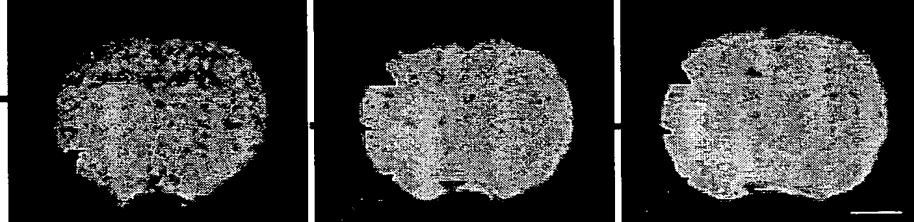
8 / 56

FIG. 8

JUST AFTER
CEREBRAL
INFARCTION

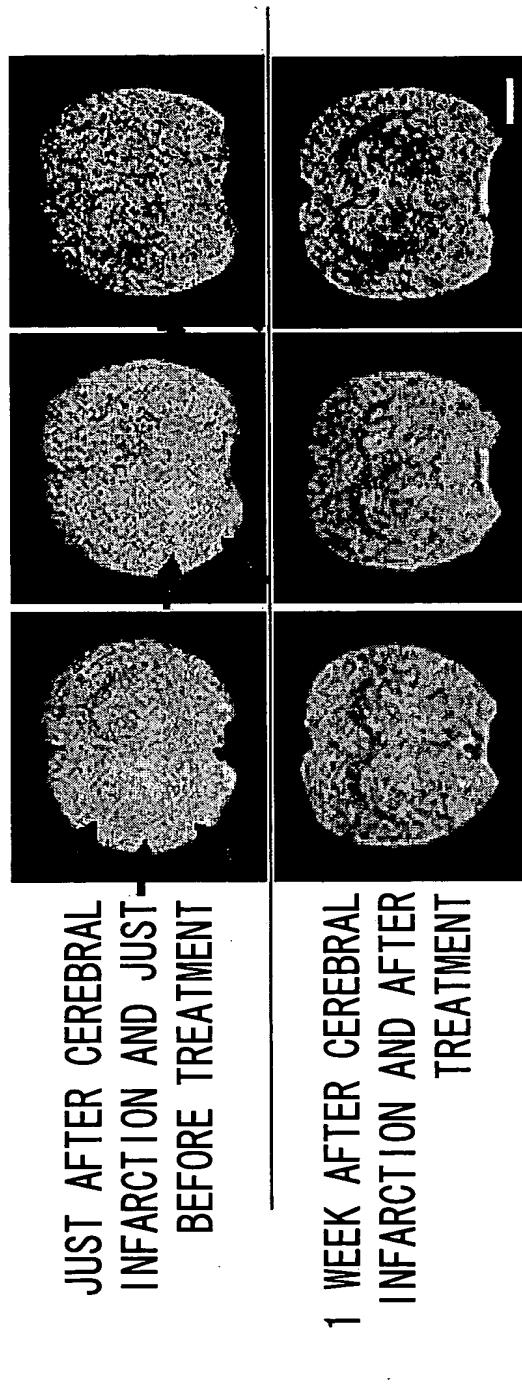


1 WEEK AFTER
CEREBRAL
INFARCTION



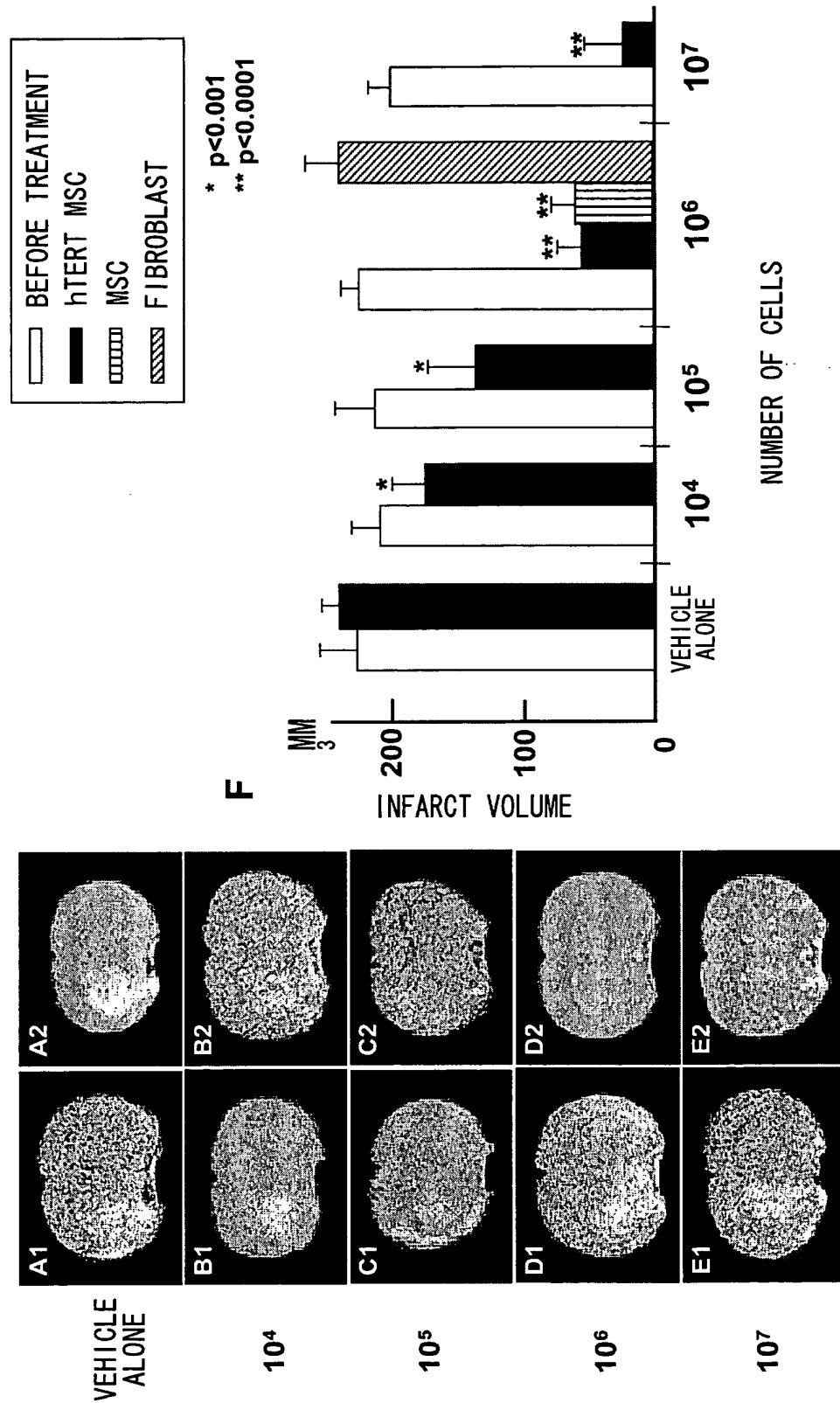
9 / 5 6

FIG. 9



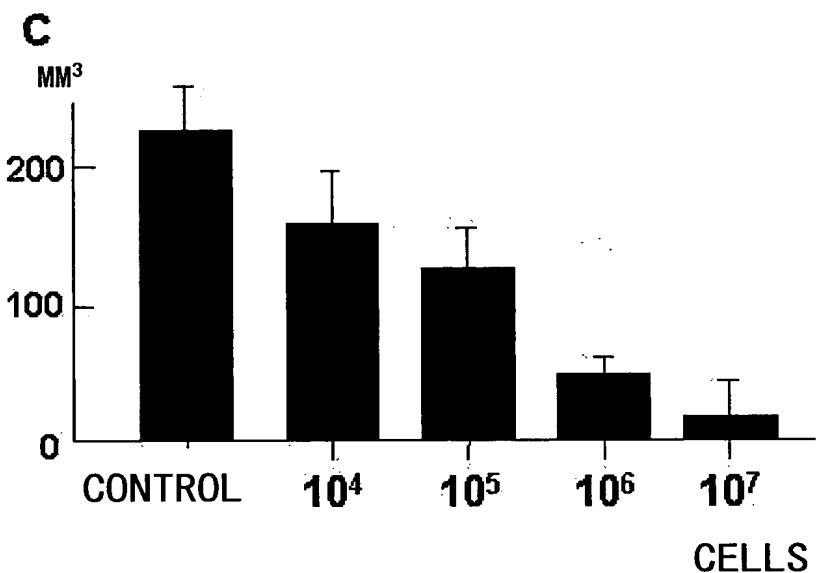
BEST AVAILABLE COPY

FIG. 10



1 1 / 5 6

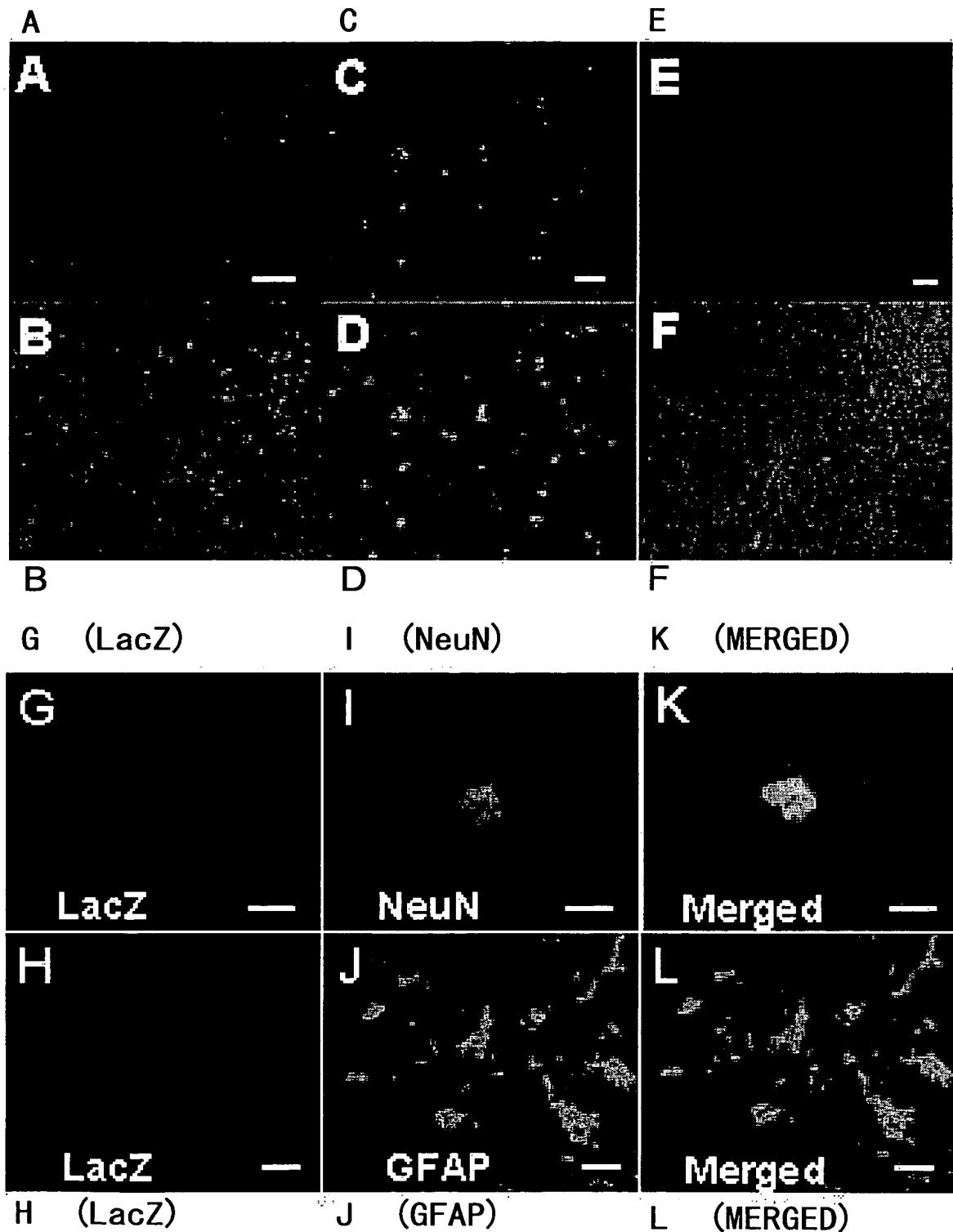
FIG. 11



BEST AVAILABLE COPY

1 2 / 5 6

FIG. 12



DEST AVAILABLE COPY

FIG. 13

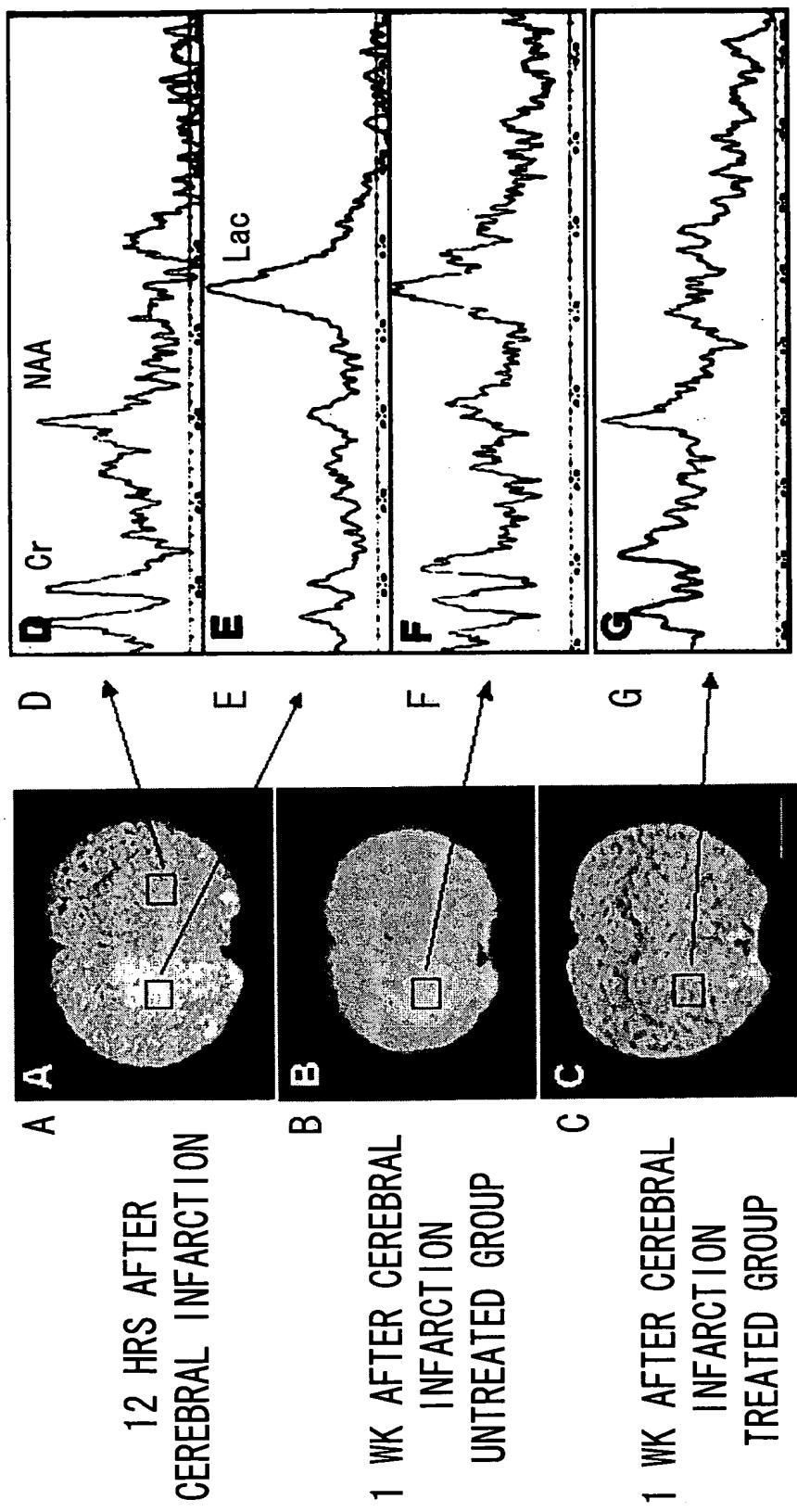
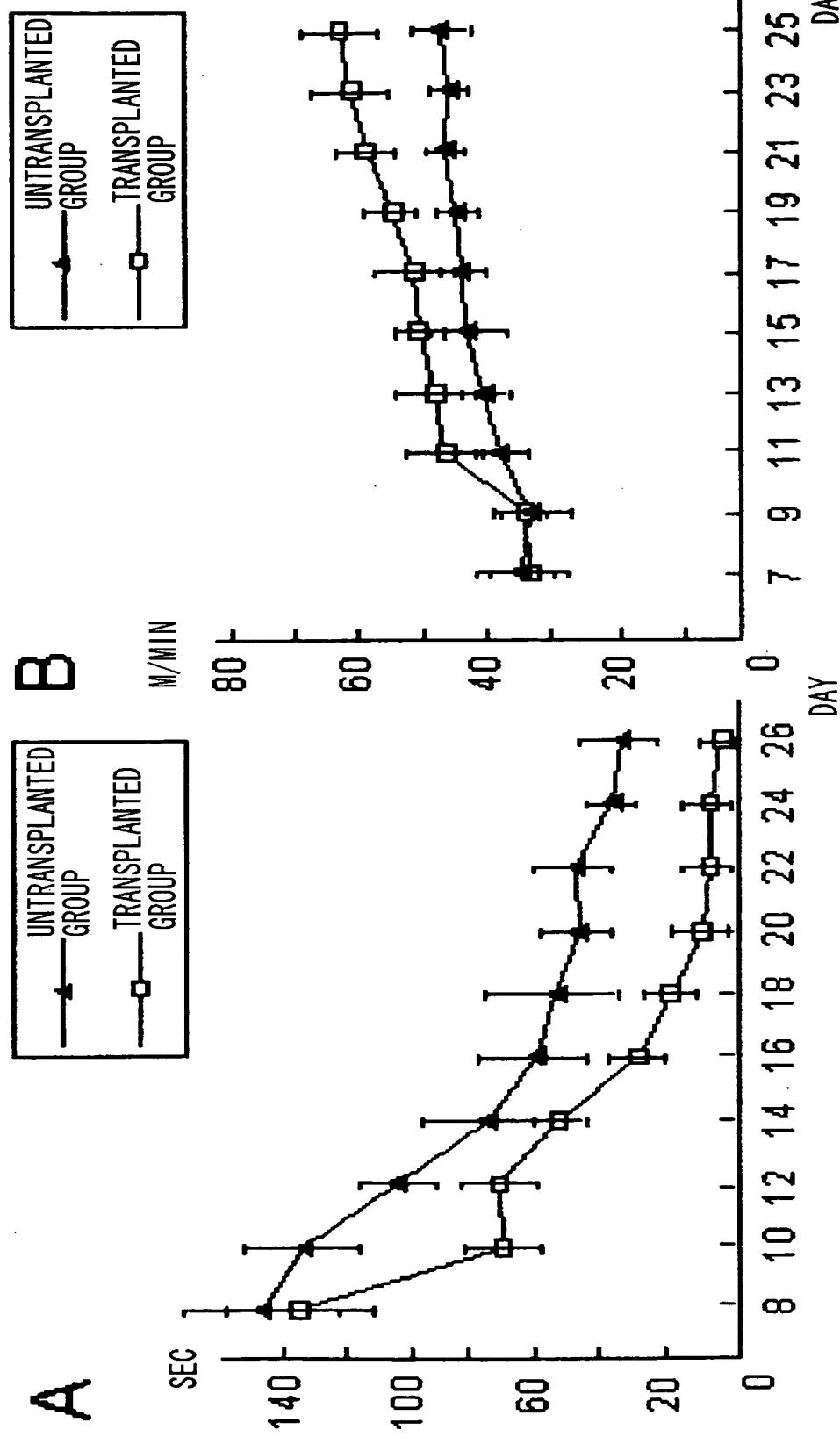
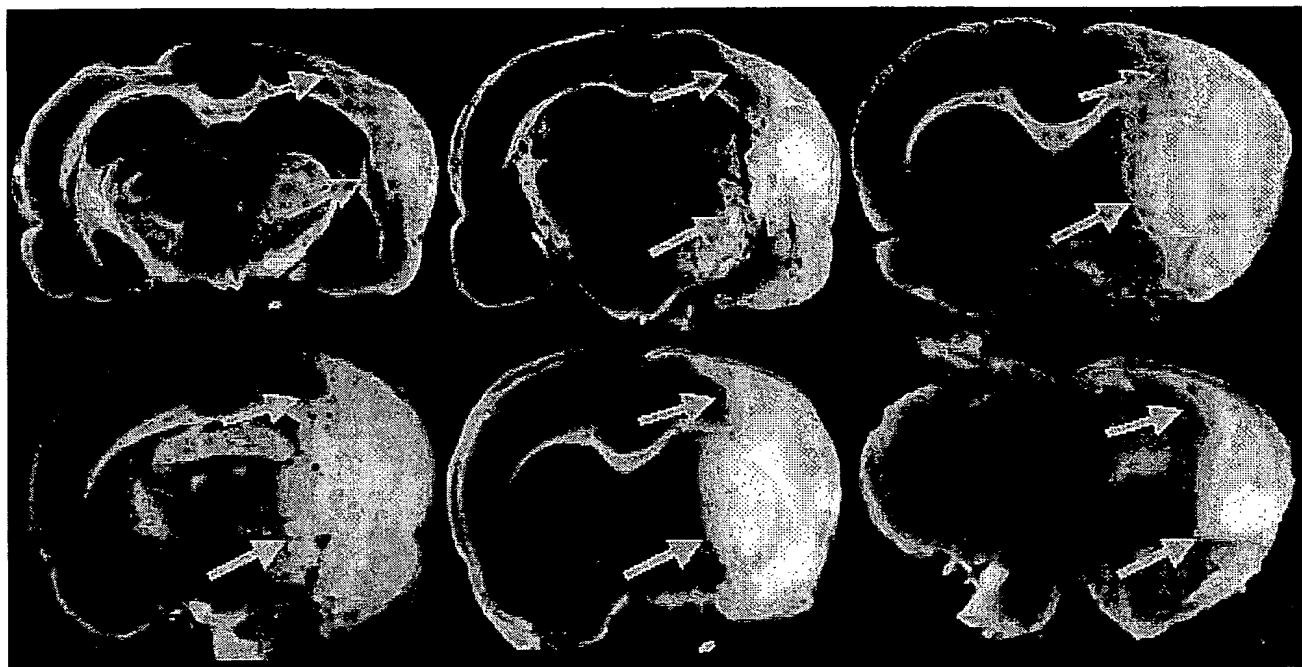


FIG. 14



15 / 56

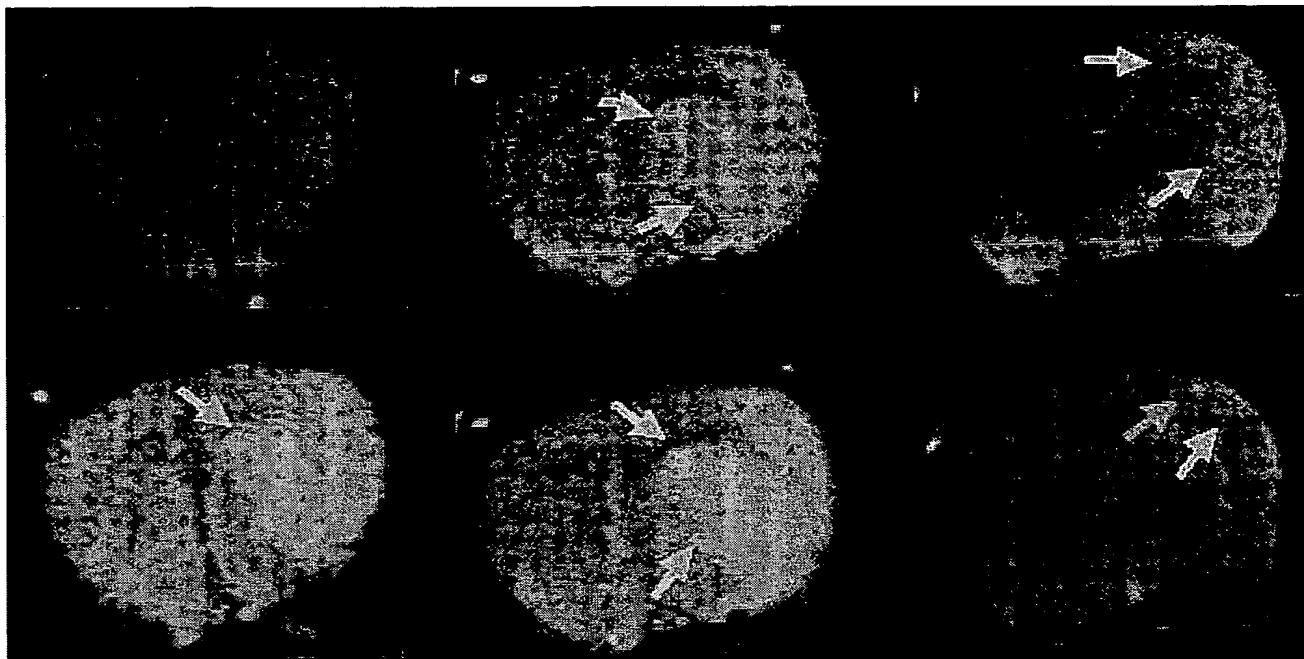
FIG. 15



BEST AVAILABLE COPY

1 6 / 5 6

FIG. 16

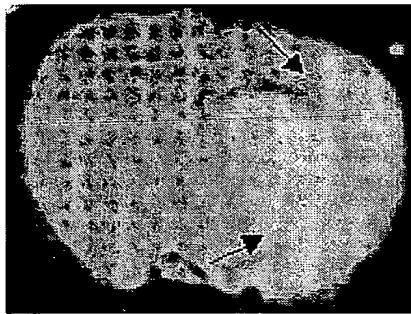


BEST AVAILABLE COPY

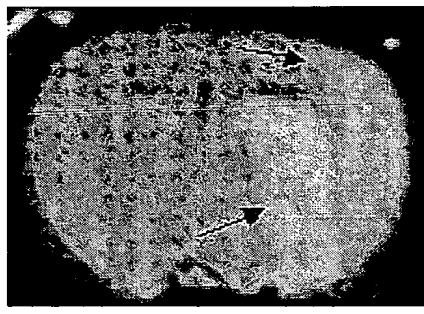
17 / 56

FIG. 17

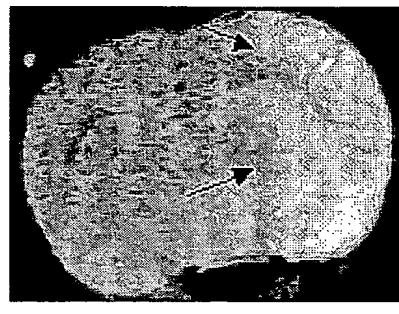
12 HRS LATER



3 DAYS LATER

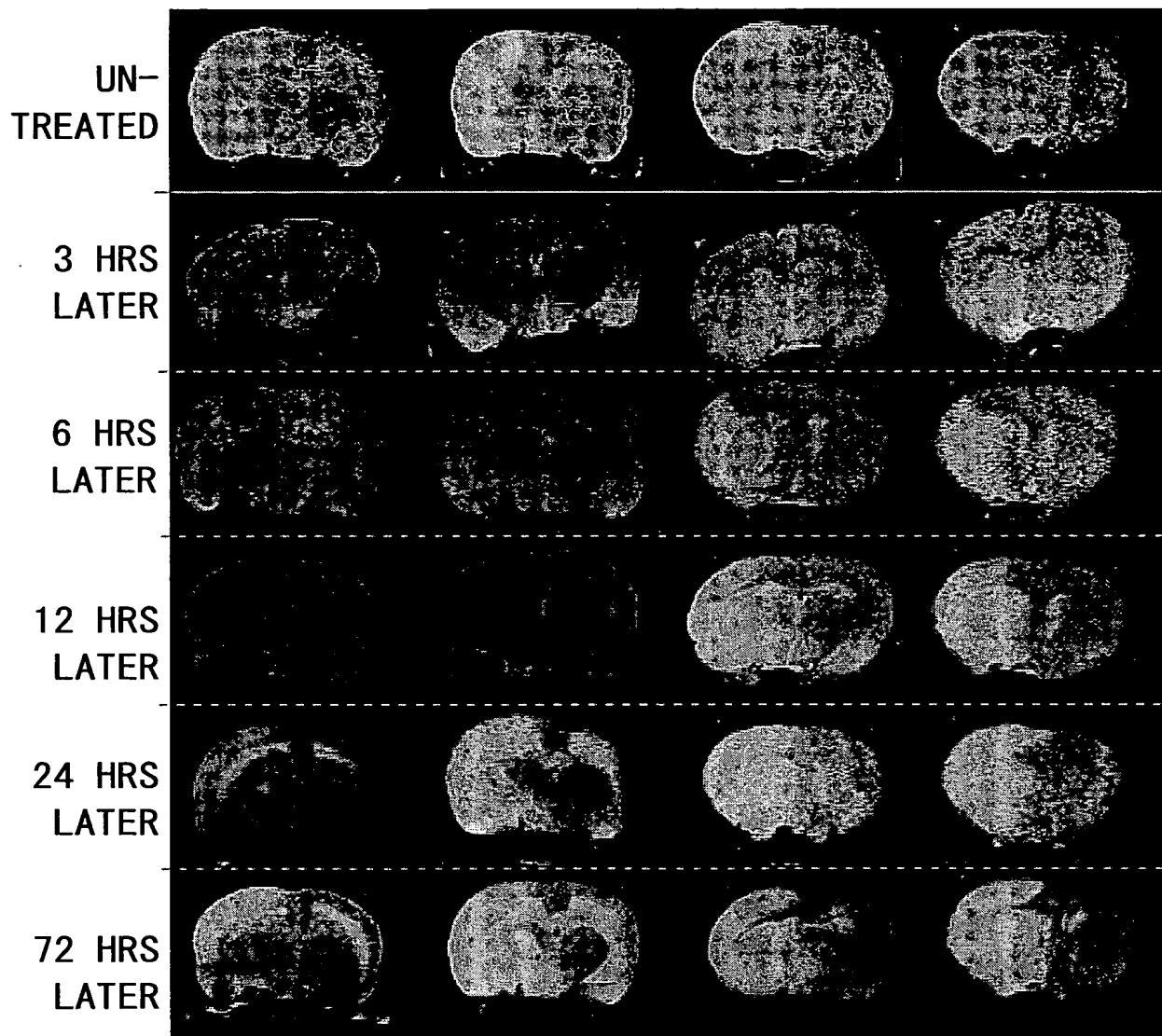


7 DAYS LATER



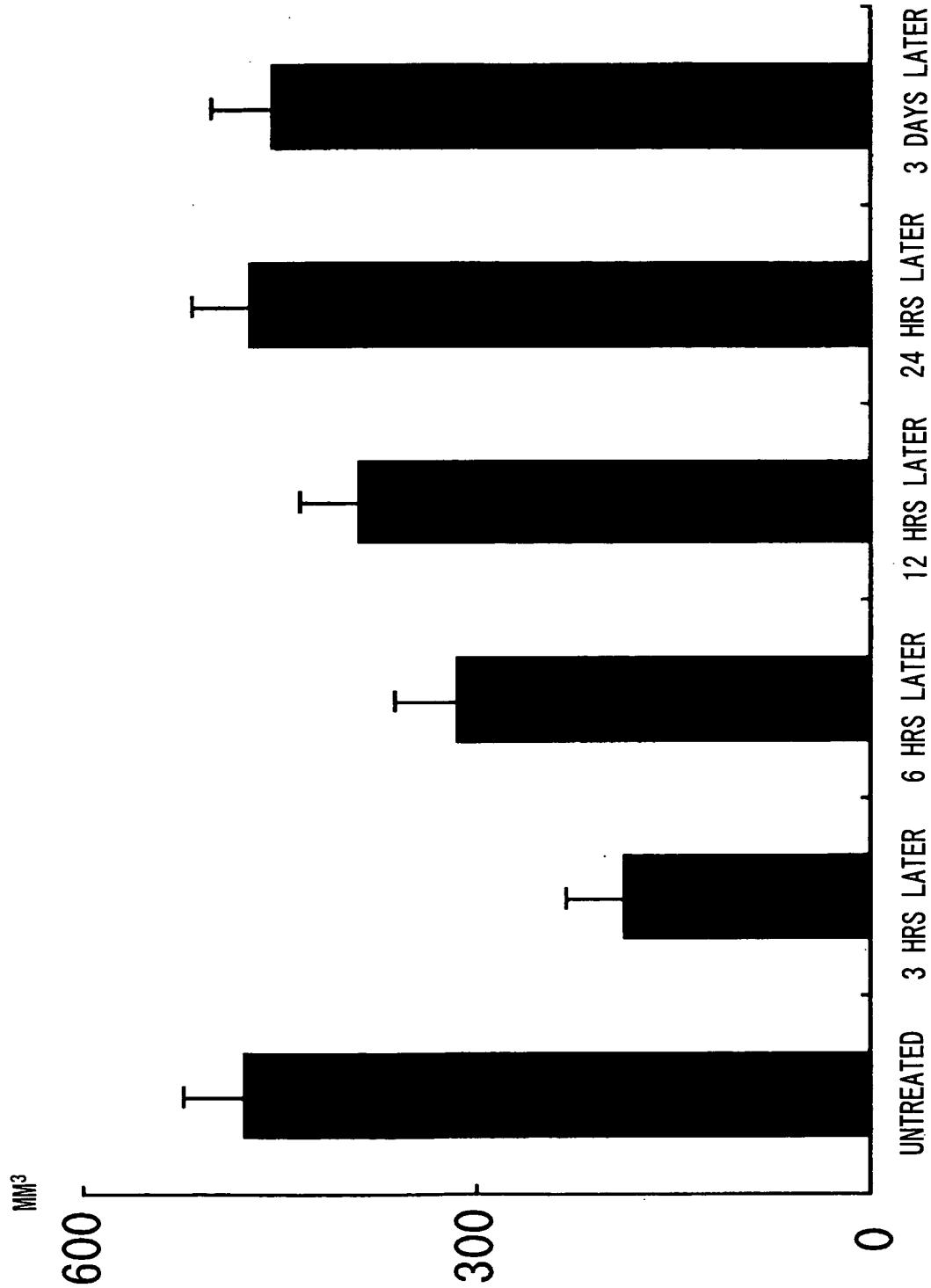
18 / 56

FIG. 18



1 9 / 5 6

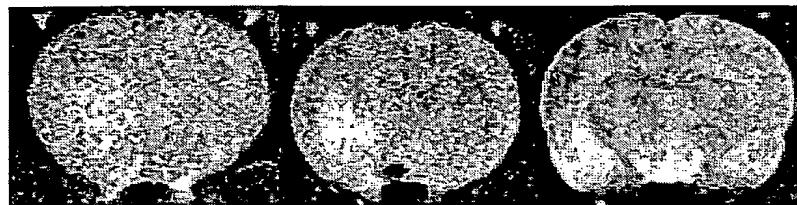
FIG. 19



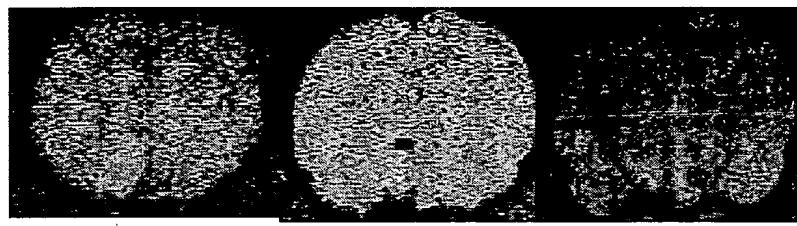
20 / 56

FIG. 20

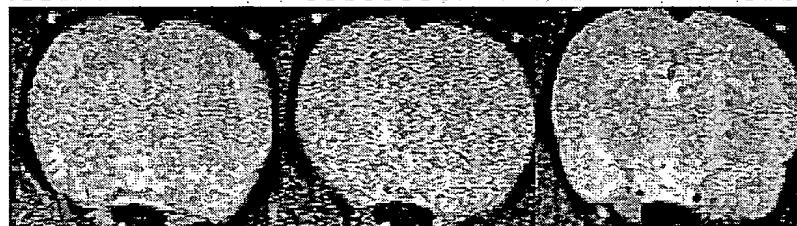
6 HRS AFTER
CEREBRAL INFARCTION,
3 HRS AFTER
TRANSPLANT



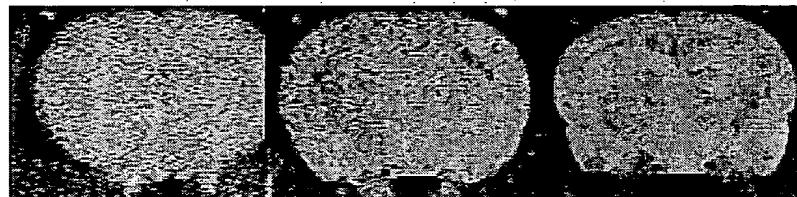
24 HRS AFTER
CEREBRAL INFARCTION,
21 HRS AFTER
TRANSPLANT



1 WEEK LATER



2 WEEKS LATER

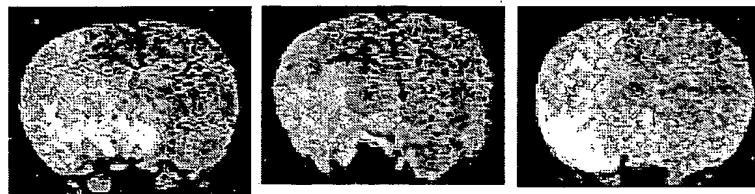


21 / 56

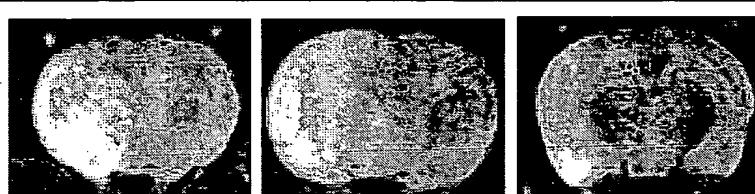
FIG. 21

BEST AVAILABLE COPY

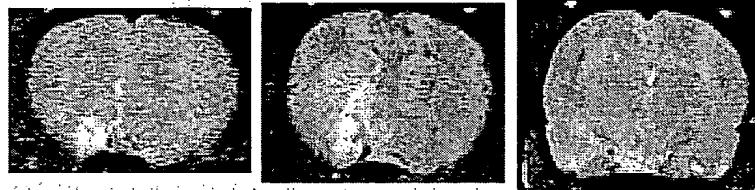
6 HRS AFTER CEREBRAL
INFARCTION, JUST
BEFORE TRANSPLANT



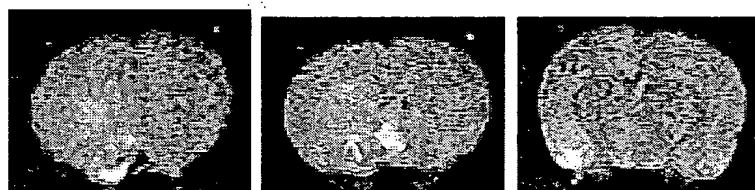
24 HRS AFTER CEREBRAL
INFARCTION, 18 HRS
AFTER TRANSPLANT



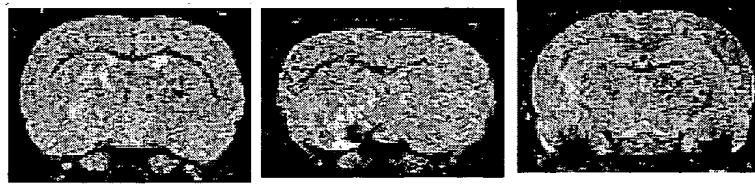
1 WEEK LATER



2 WEEKS LATER

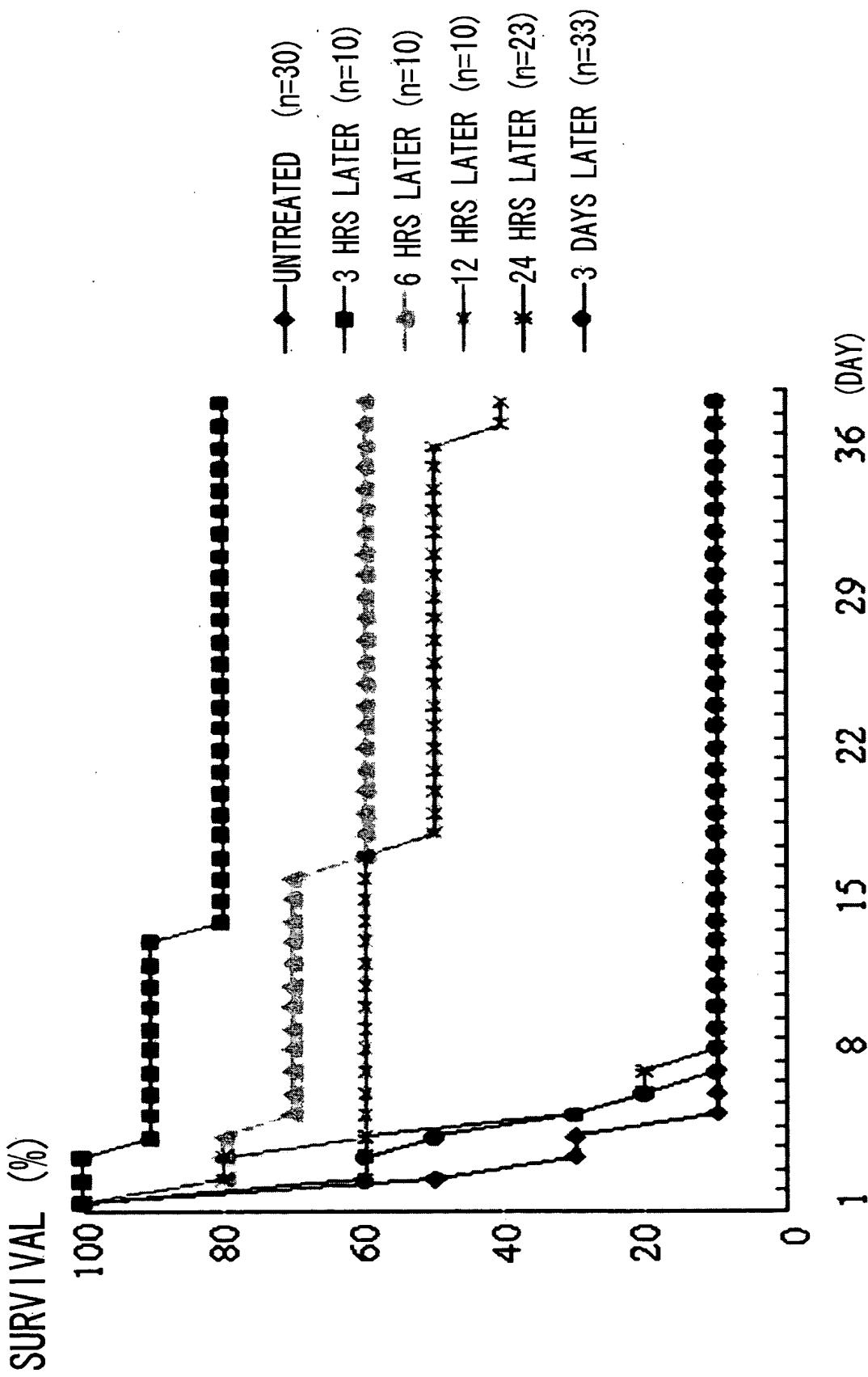


4 WEEKS LATER



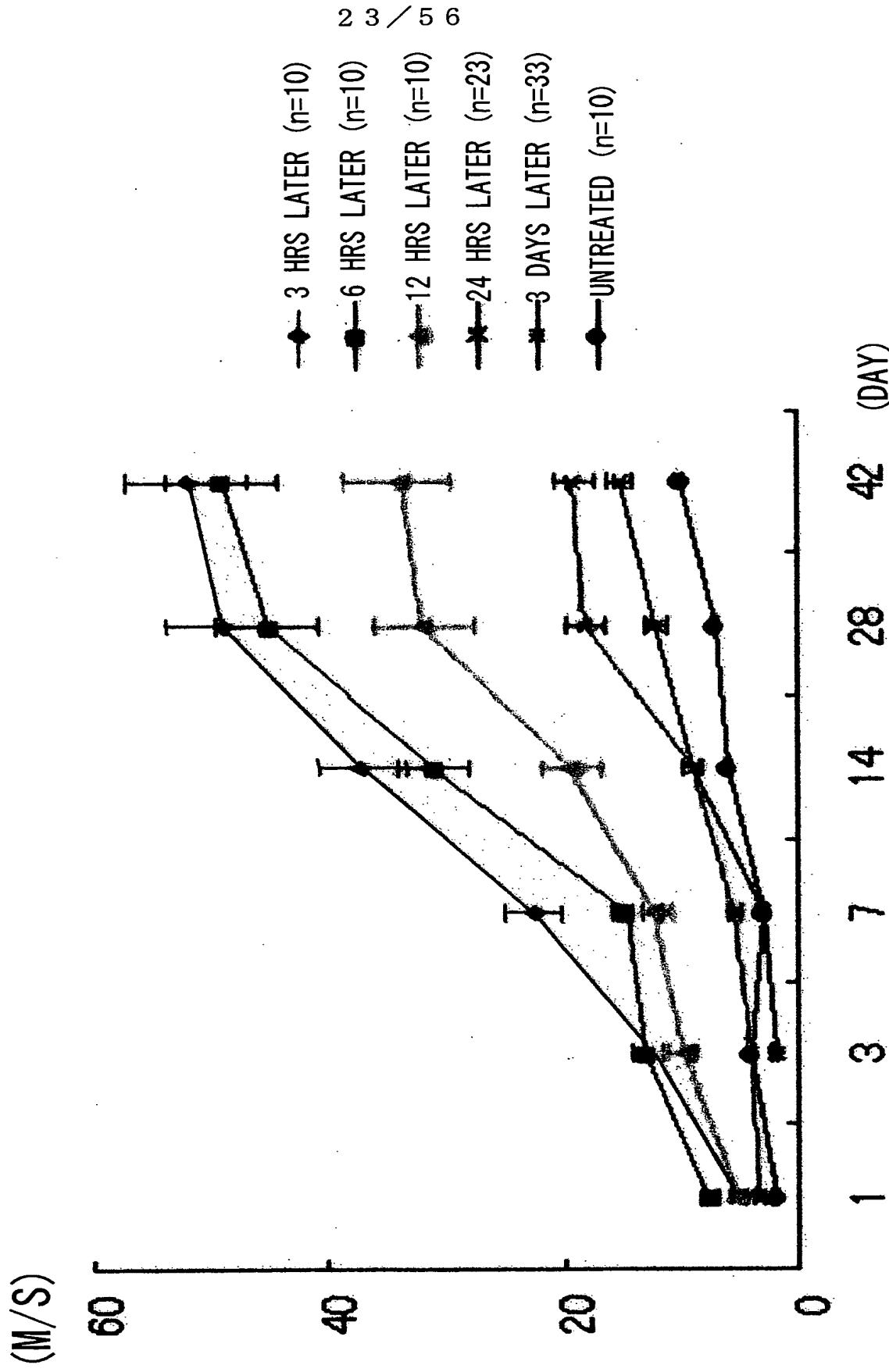
22 / 56

FIG. 22



BEST AVAILABLE COPY

FIG. 23

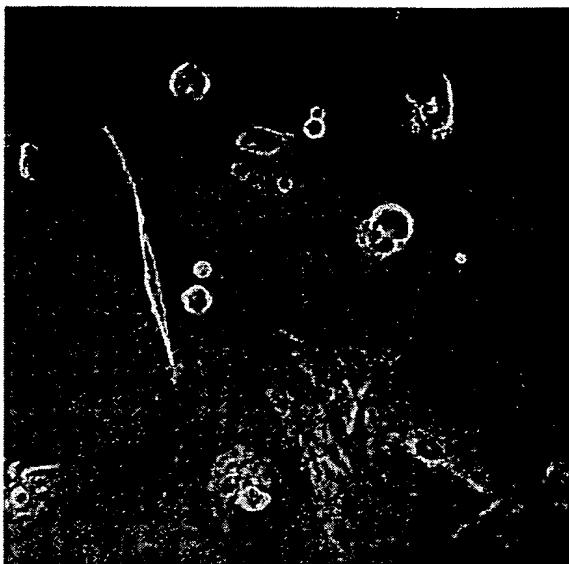


24 / 56

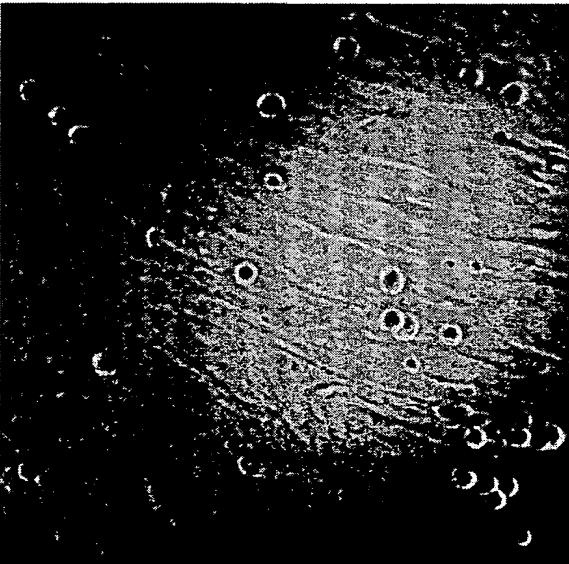
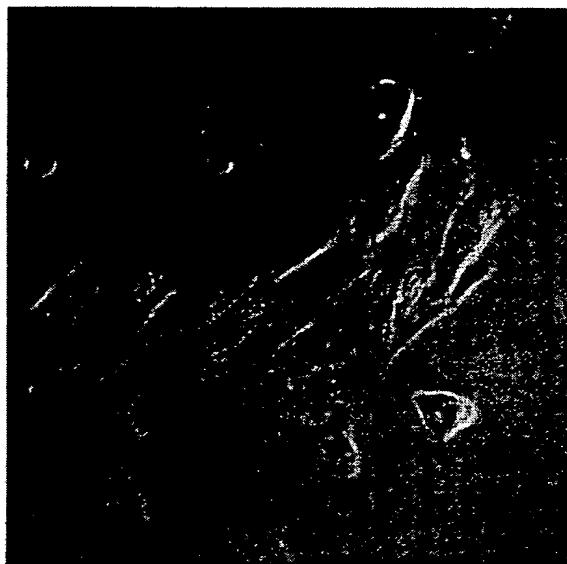
FIG. 24

MSC CELLS

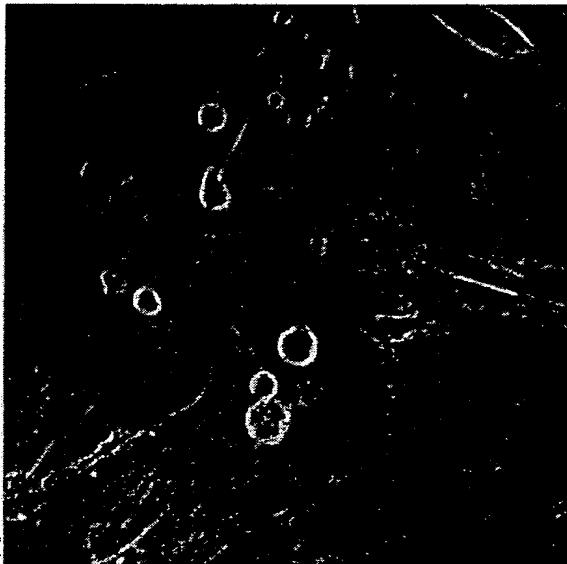
CONTROL



G-CSF DAY 3 S. C.



G-CSF+SCF DAY 7 S. C.



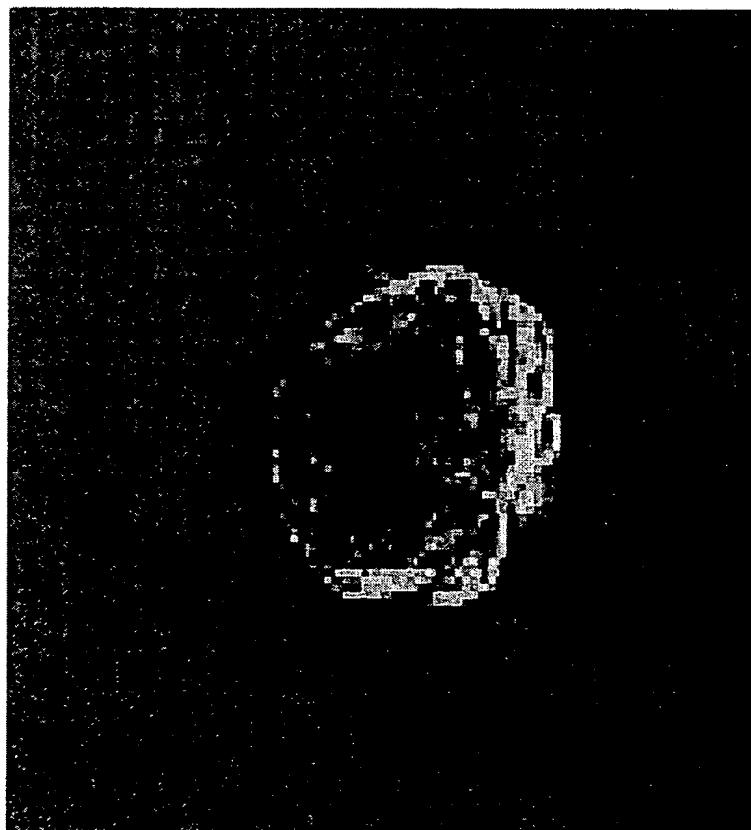
CORD BLOOD

BEST AVAILABLE COPY

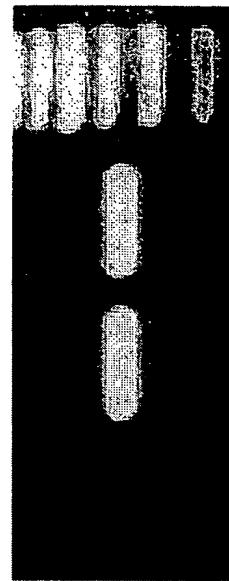
25 / 56

FIG. 25

NEUROSPHERE



RT-PCT (NESTIN)
C DAY 1 DAY 2 M



BEST AVAILABLE COPY

26 / 56

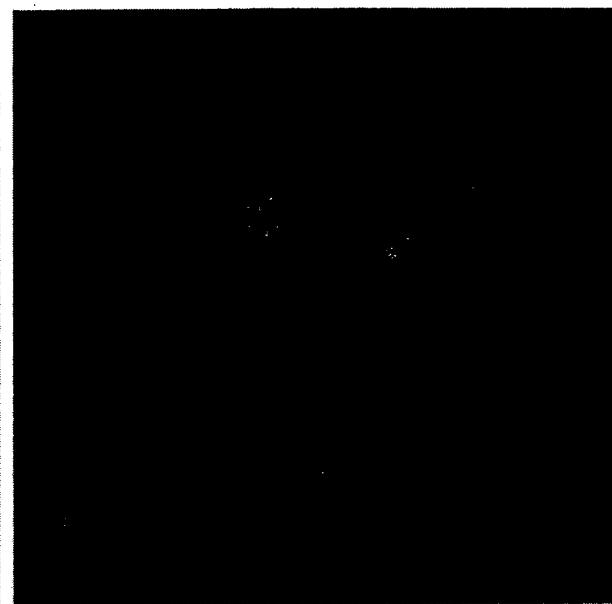
FIG. 26

BEST AVAILABLE COPY

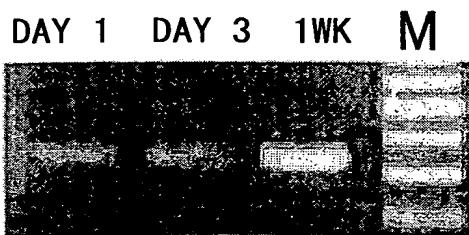
NF



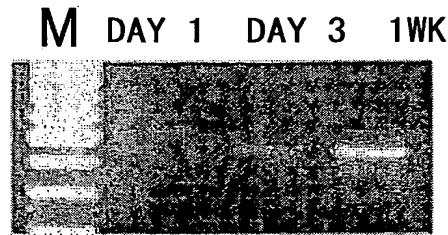
GFAP



RT-PCR (NF)

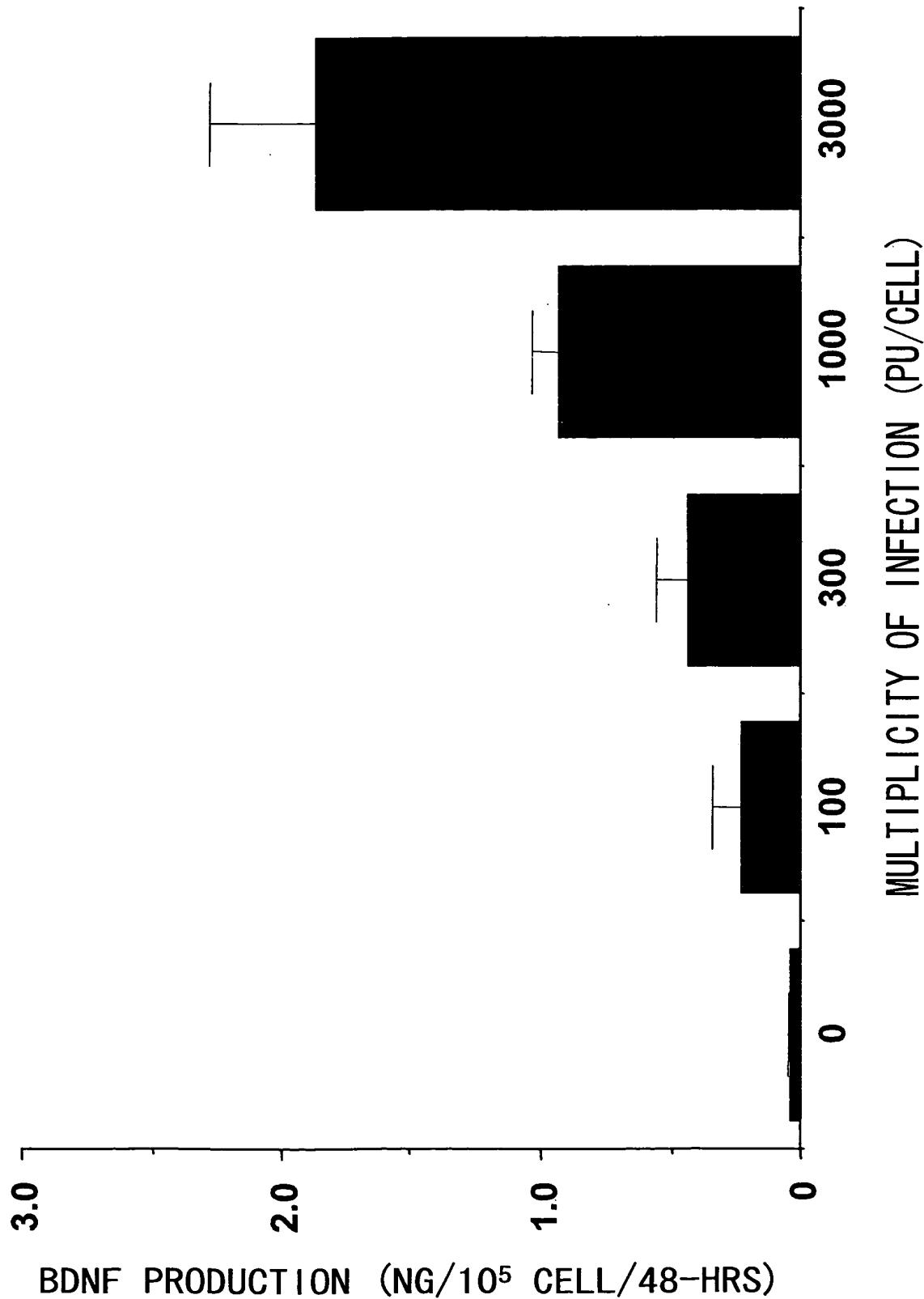


RT-PCR (GFAP)



27 / 56

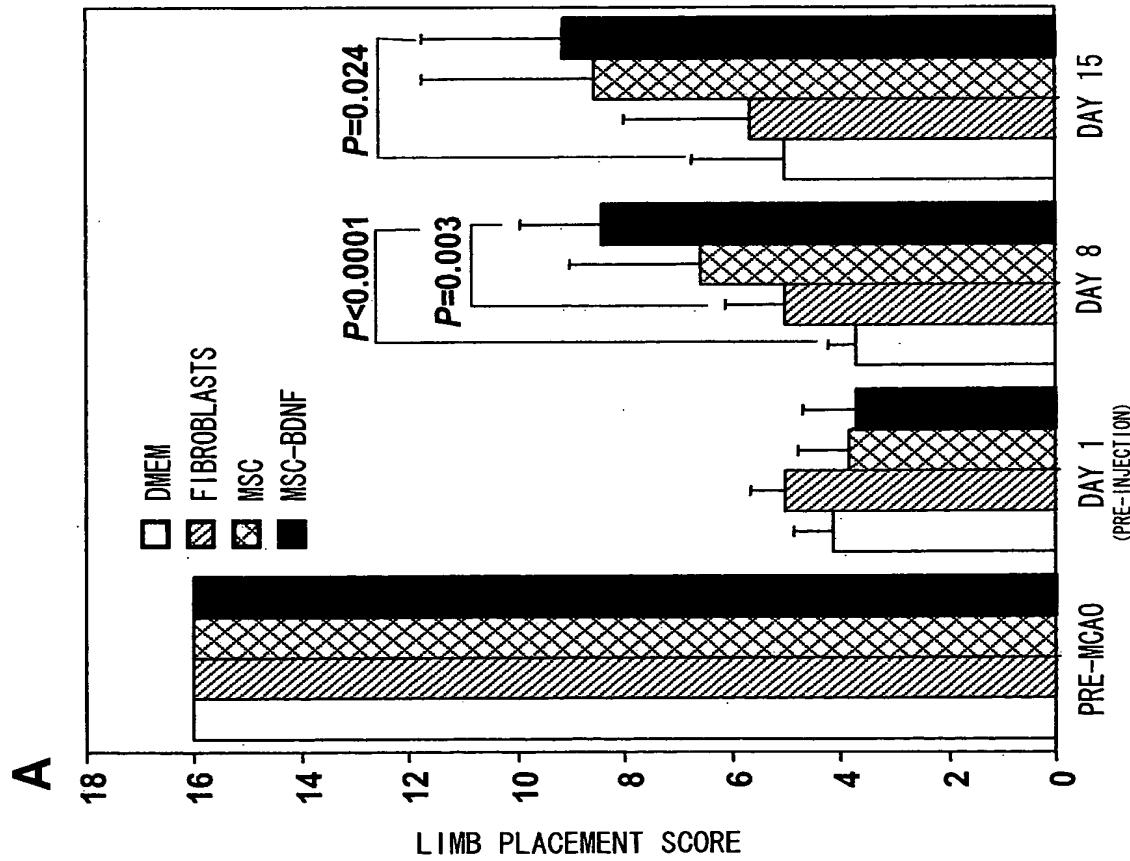
FIG. 27



3EST AVAILABLE COPY

28 / 56

FIG. 28



BEST AVAILABLE COPY

FIG. 29A

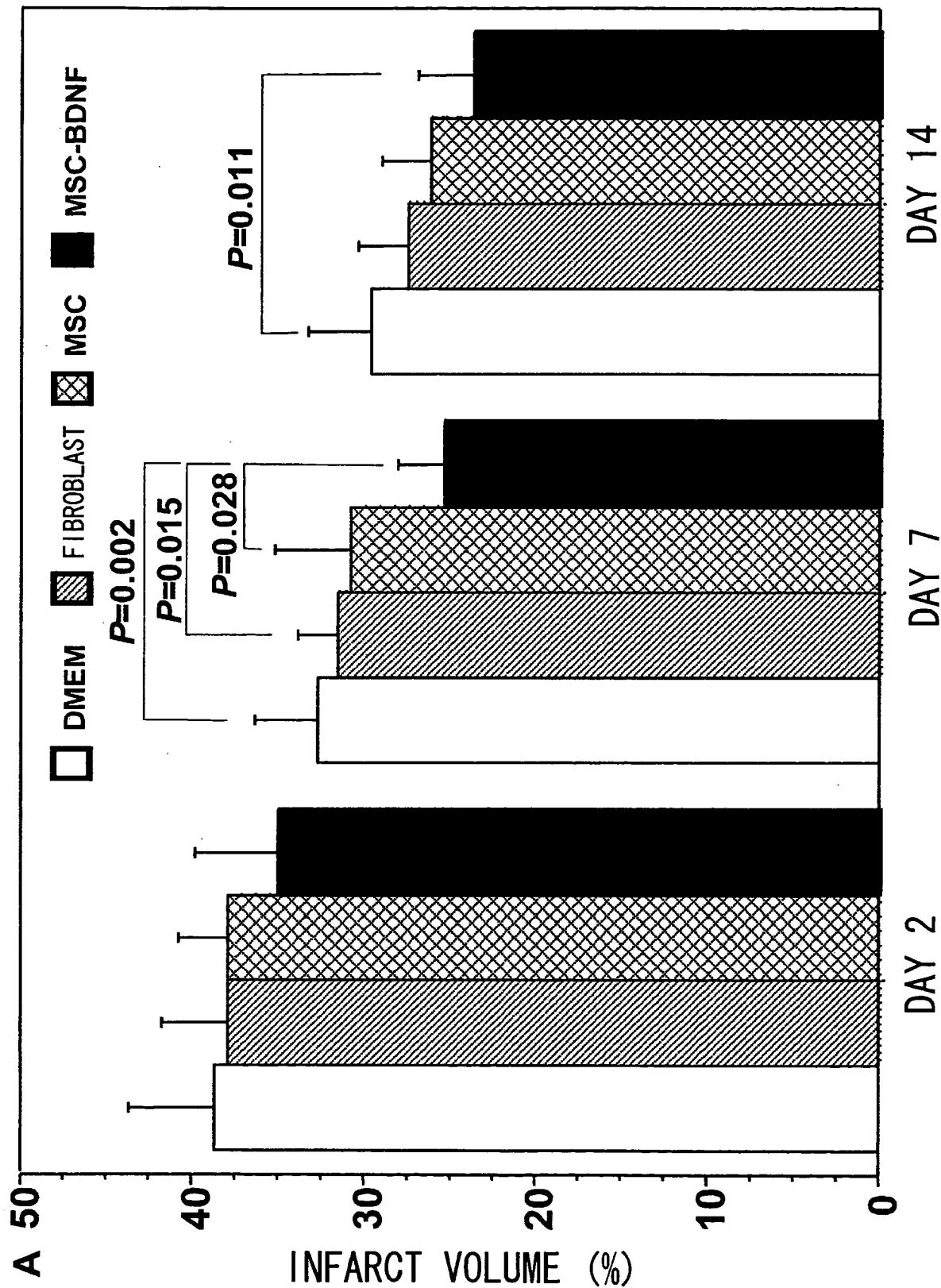
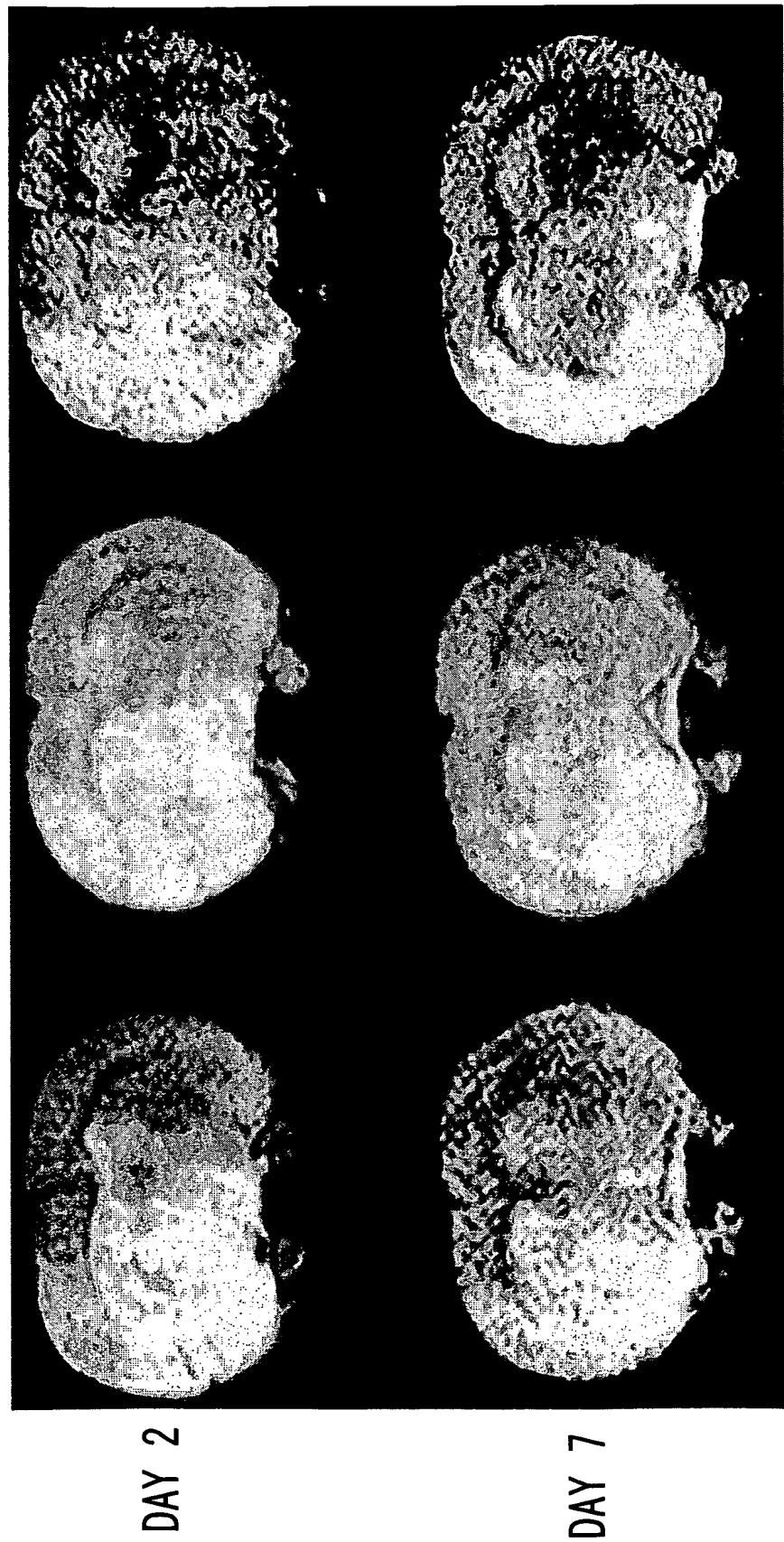
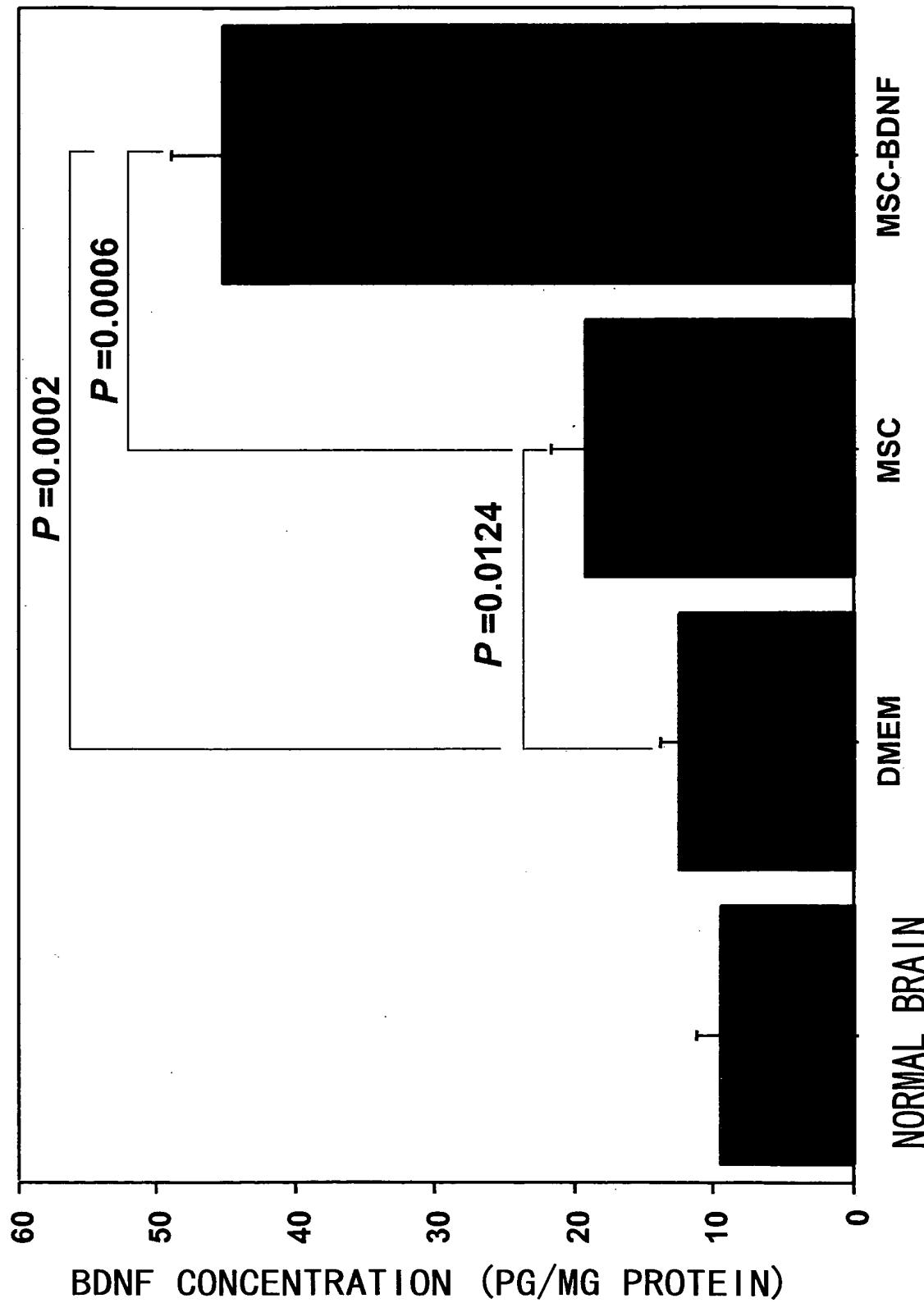


FIG. 29B



31 / 56

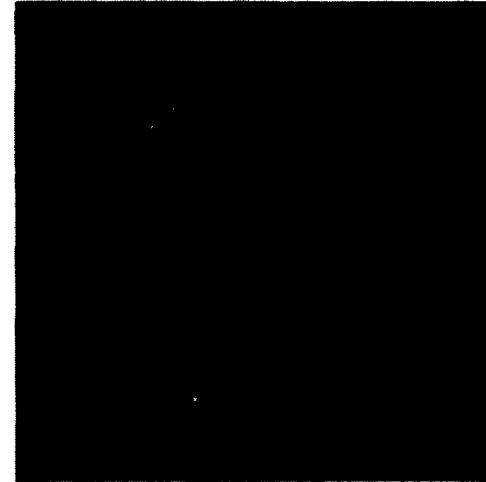
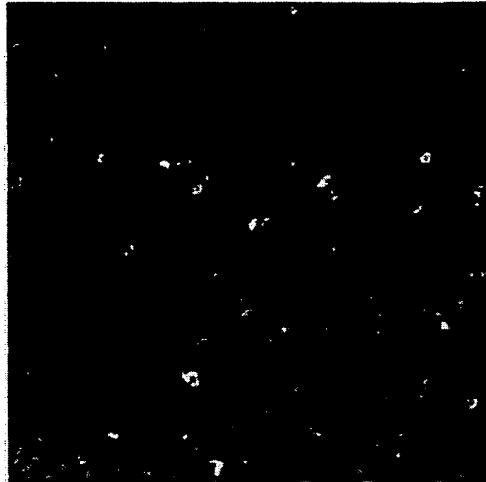
FIG. 30



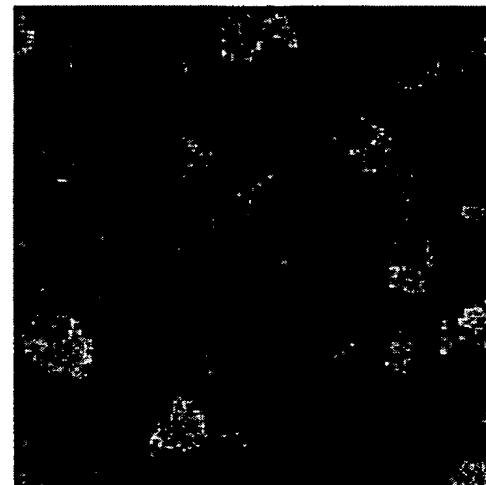
BEST AVAILABLE COPY

3 2 / 5 6

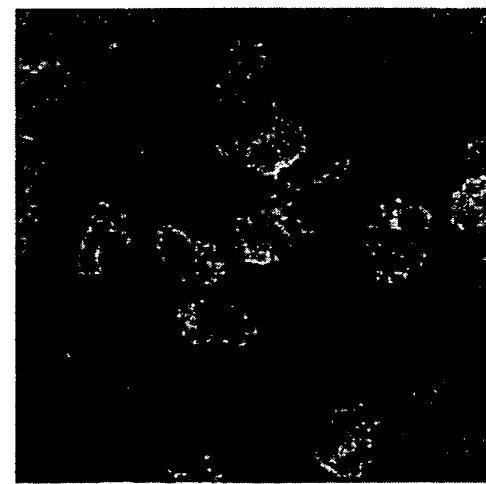
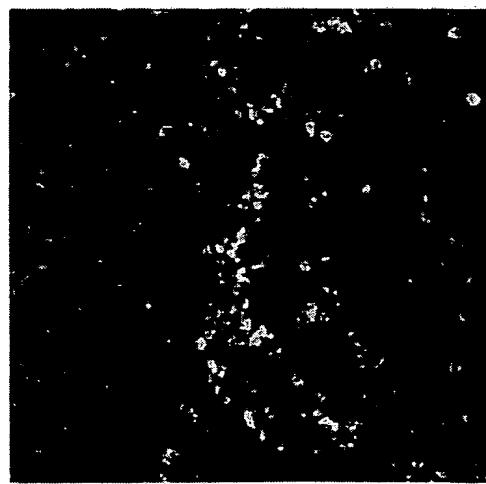
FIG. 31AB



MSC-BDNF



MSC



DMEM

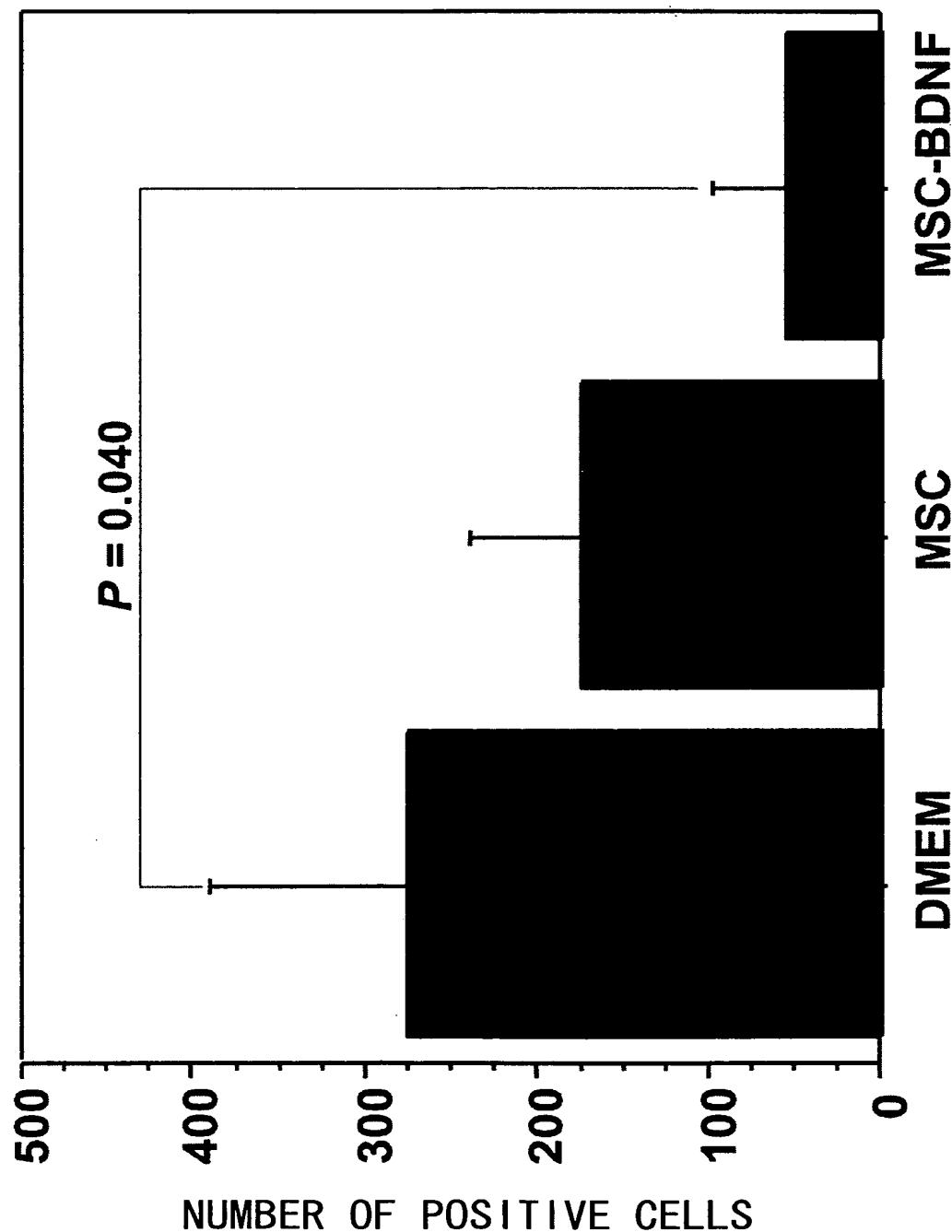
A

B

BEST AVAILABLE COPY

33 / 56

FIG. 31C



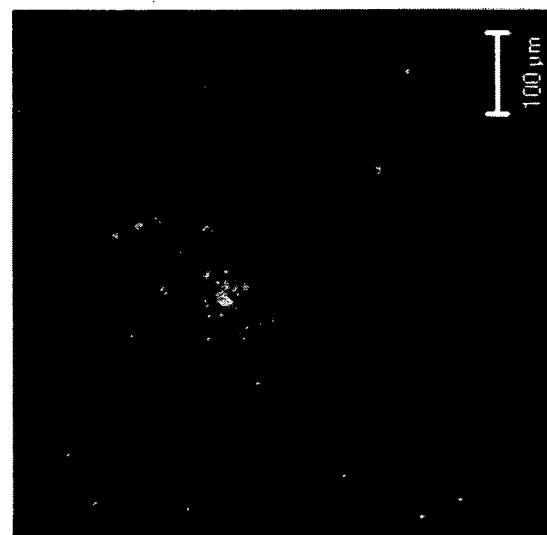
BEST AVAILABLE COPY

34 / 56

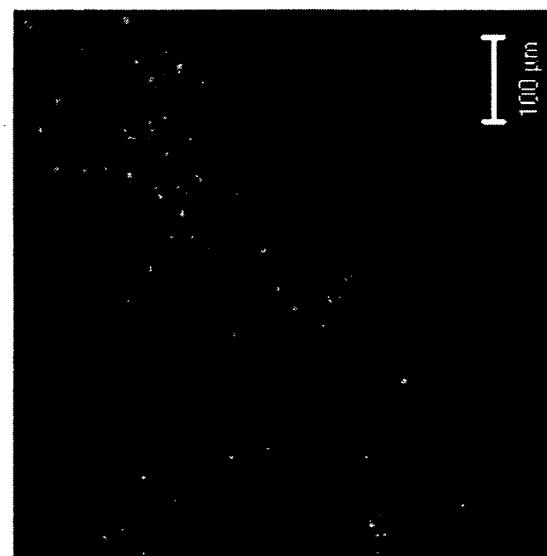
FIG. 31D



MSC-BDNF



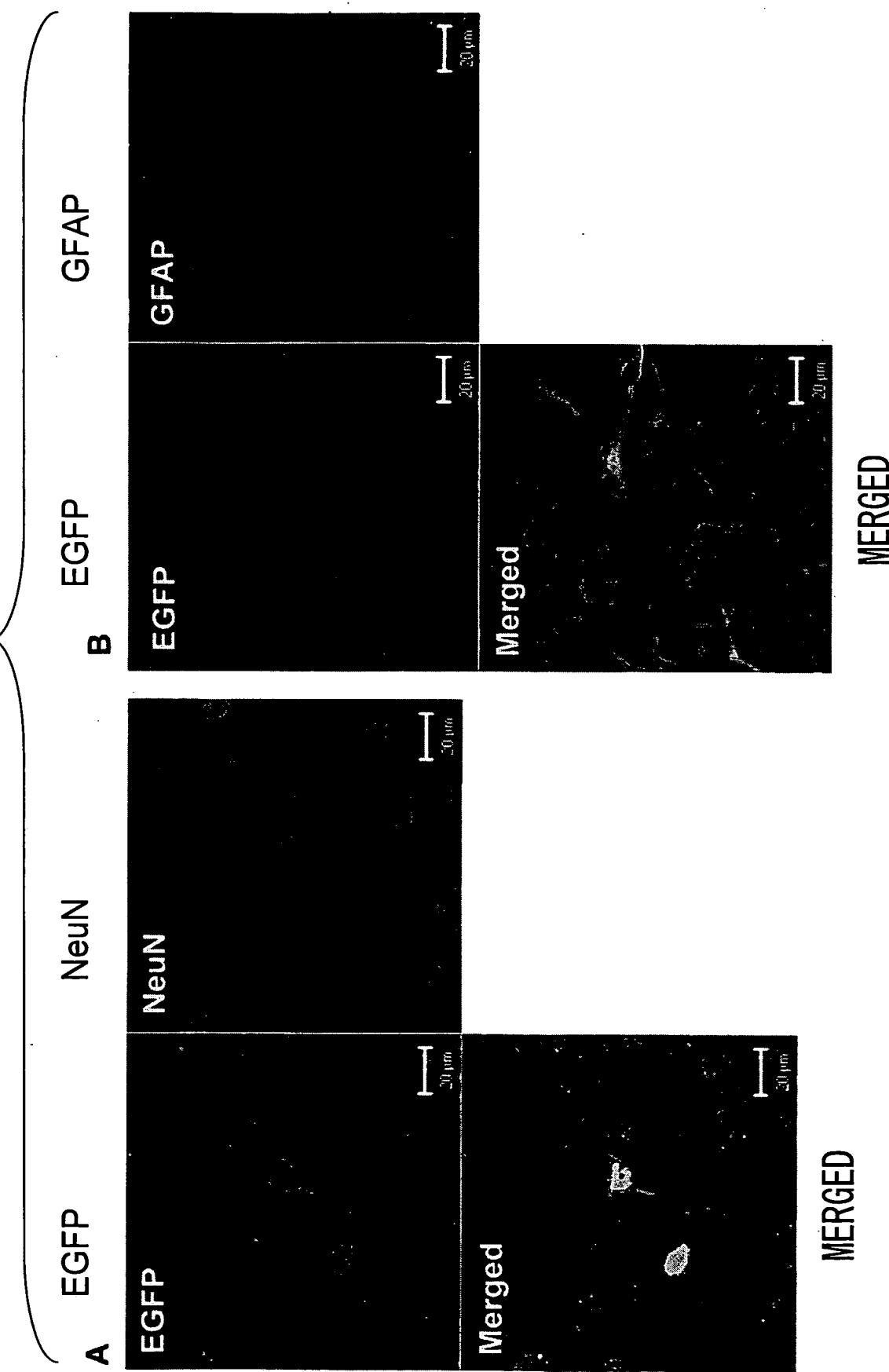
MSC



DMEM

BEST AVAILABLE COPY

FIG. 32



38 / 56

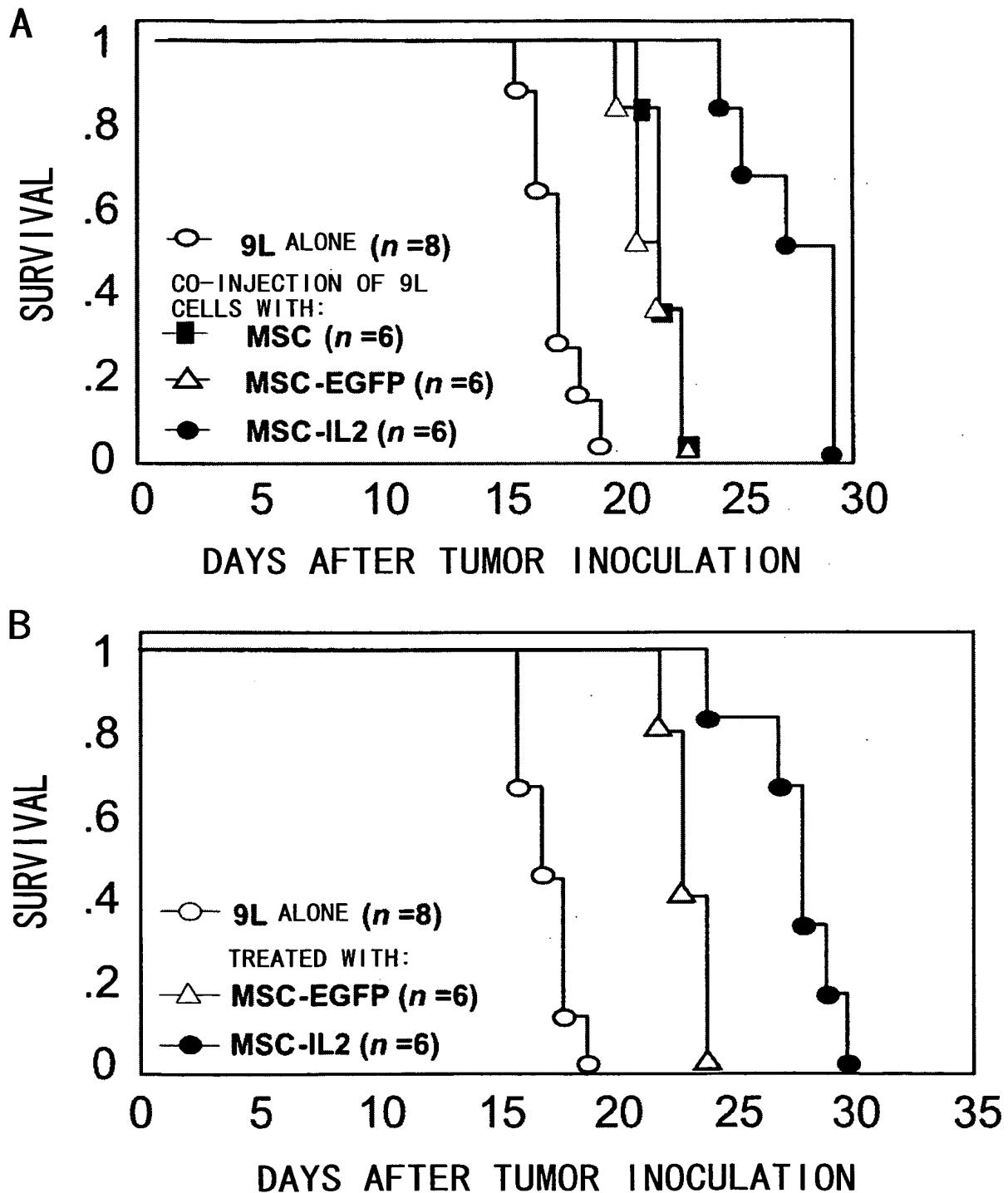
FIG. 35



BEST AVAILABLE COPY

3 9 / 5 6

FIG. 36



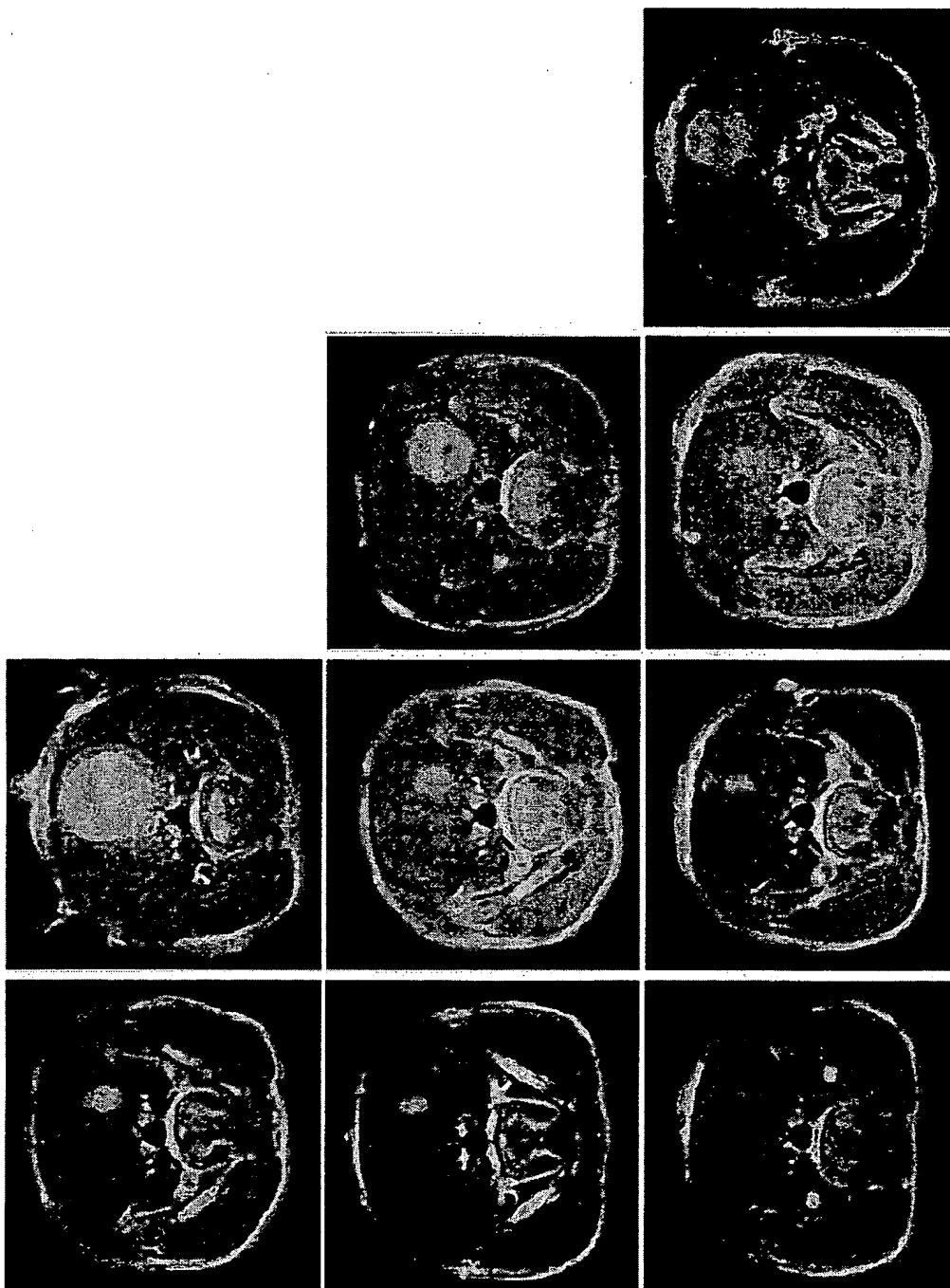
4 0 / 5 6

FIG. 37

BEST AVAILABLE COPY

DAY AFTER TUMOR INOCULATION

28
21
14
7



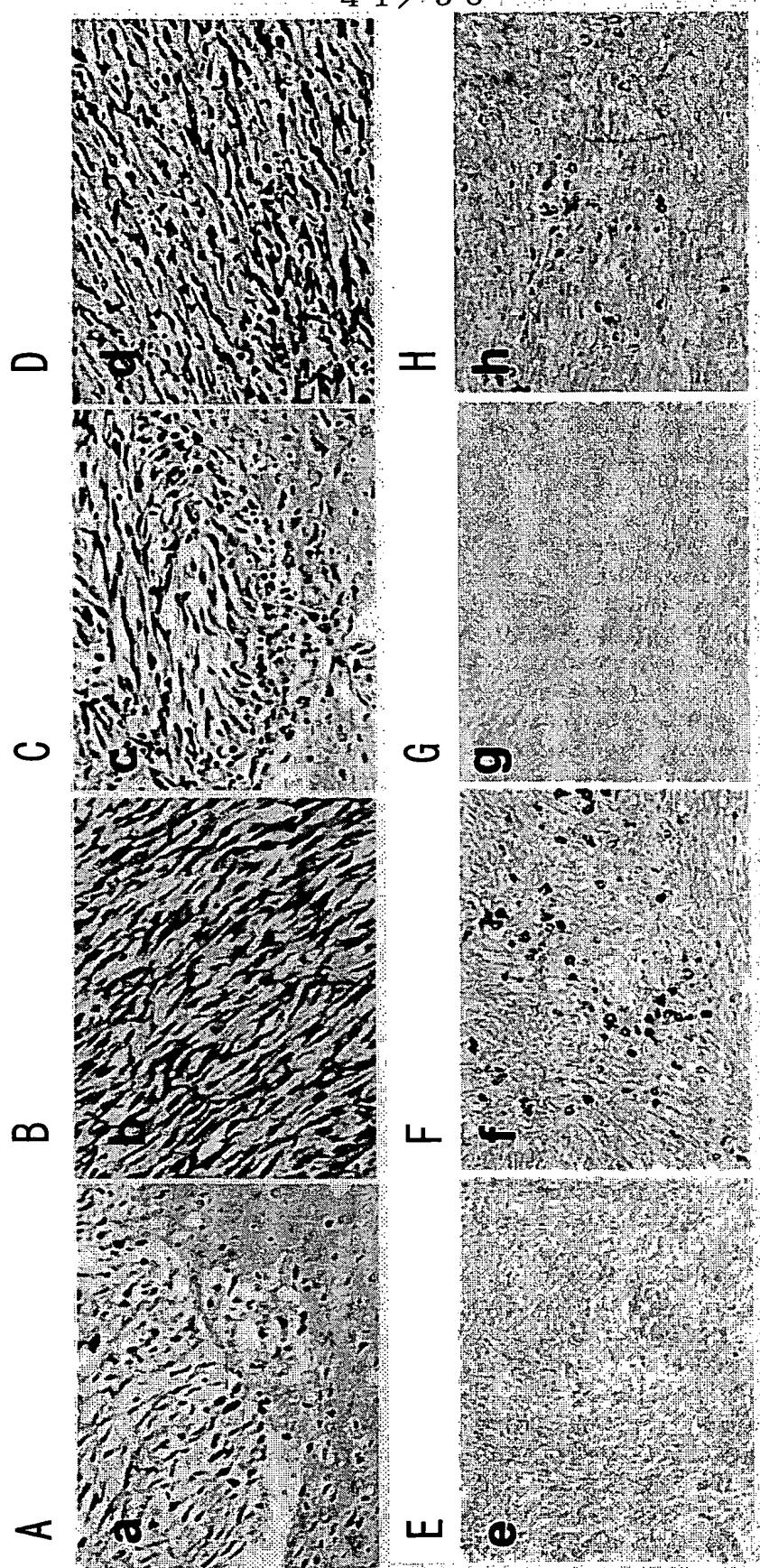
CONTROL

MSC

MSC- IL2

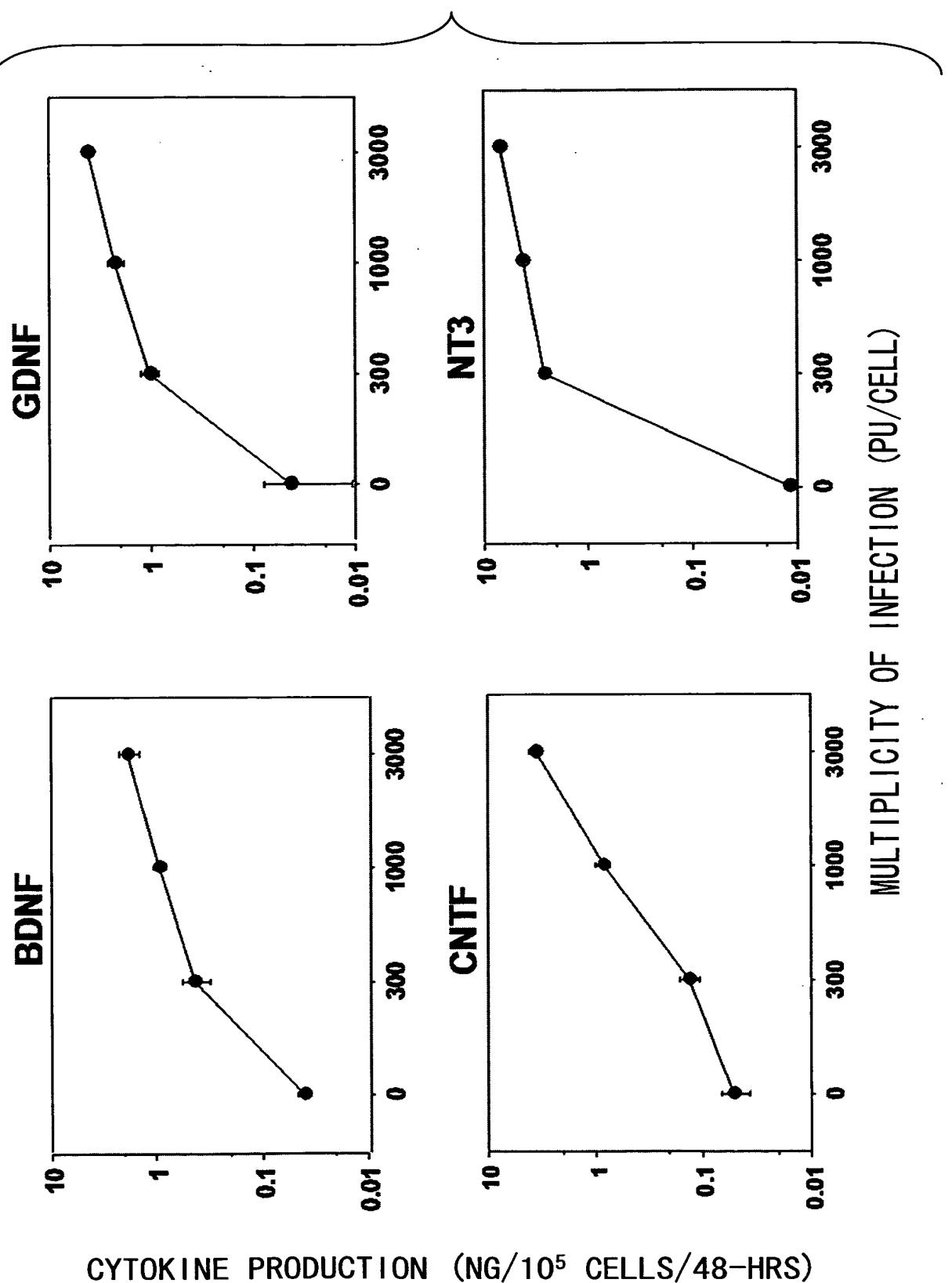
41 / 56

FIG. 38



42 / 56

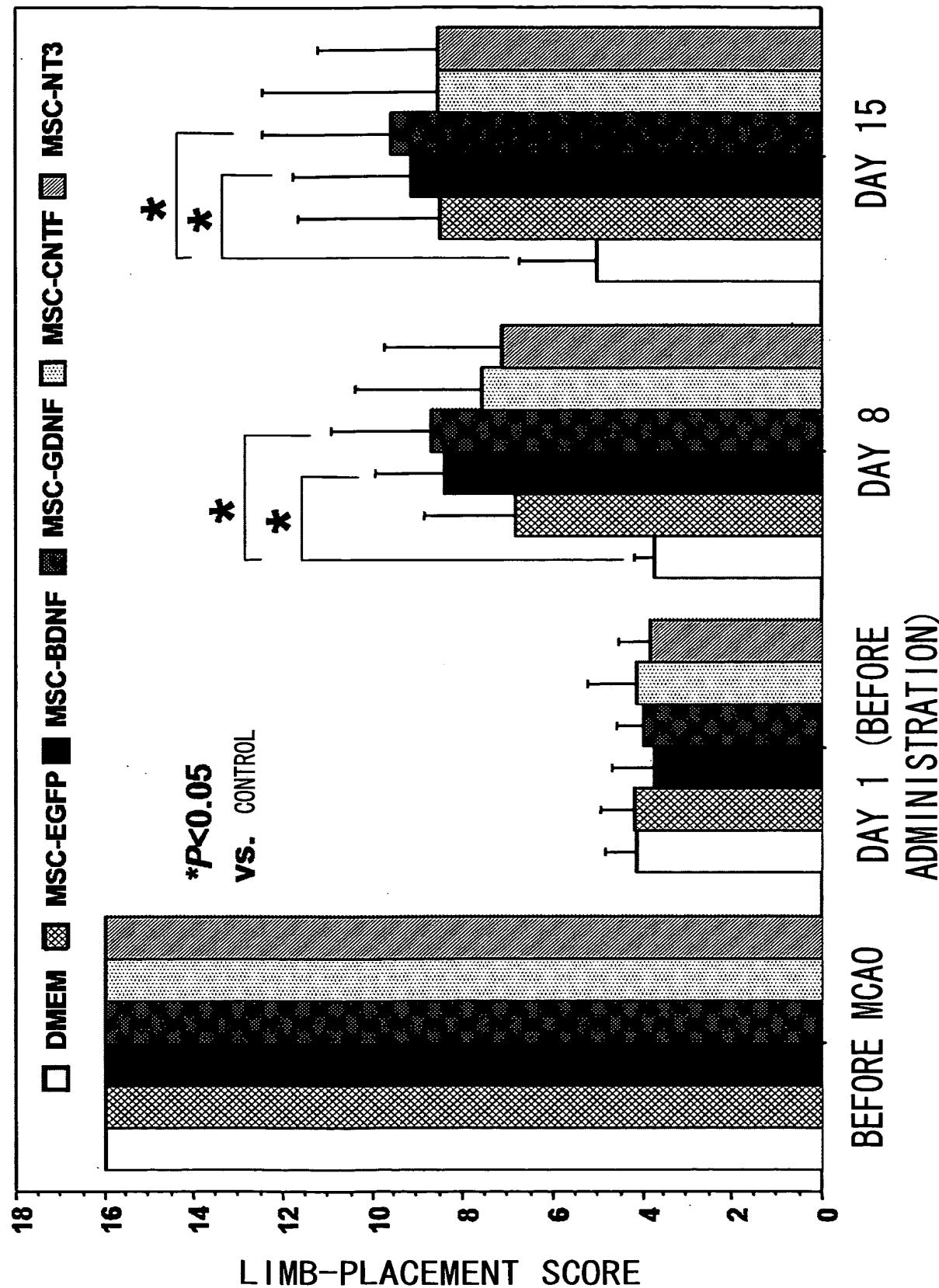
FIG. 39



BEST AVAILABLE COPY

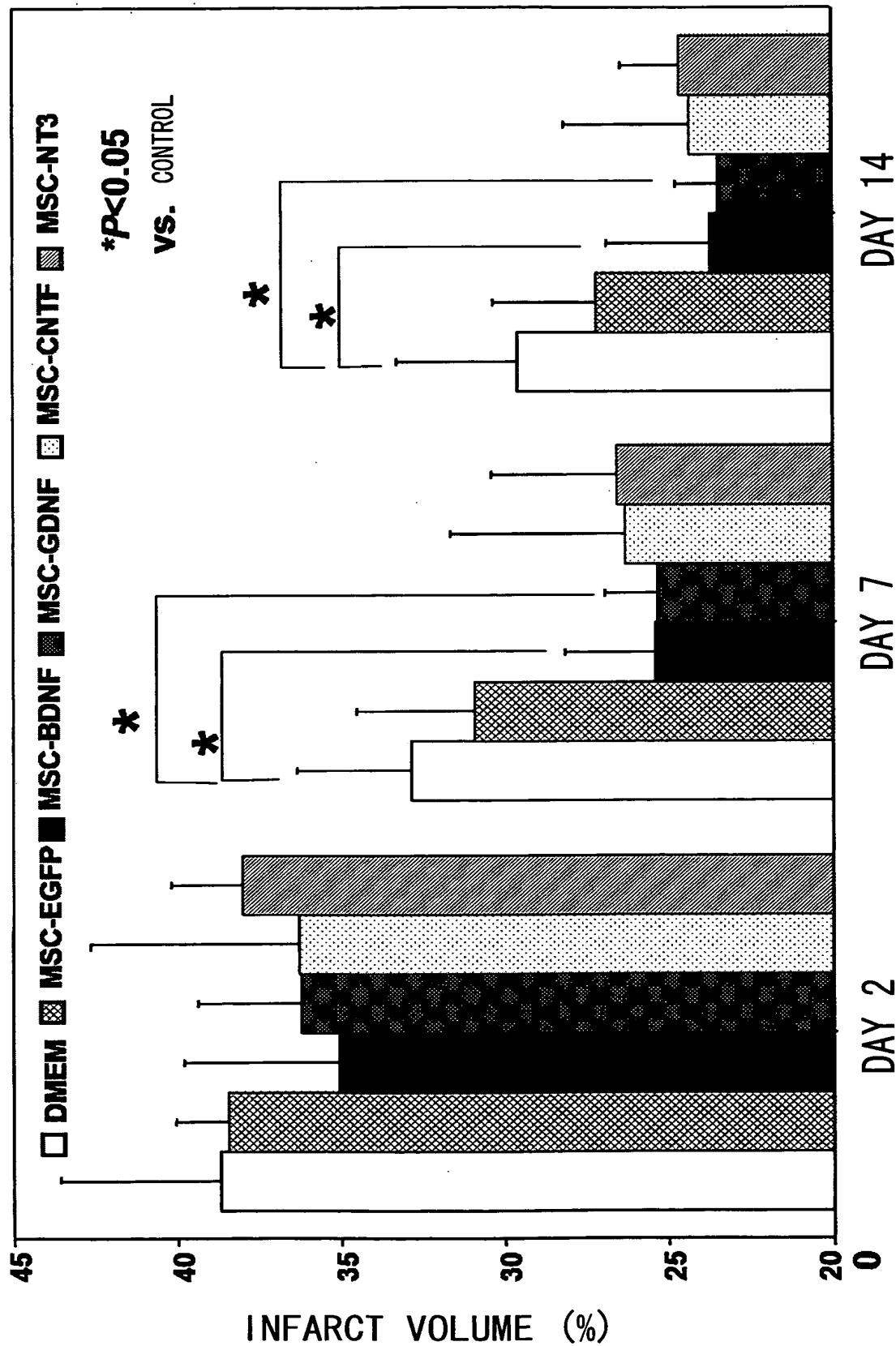
43 / 56

FIG. 40



44 / 56

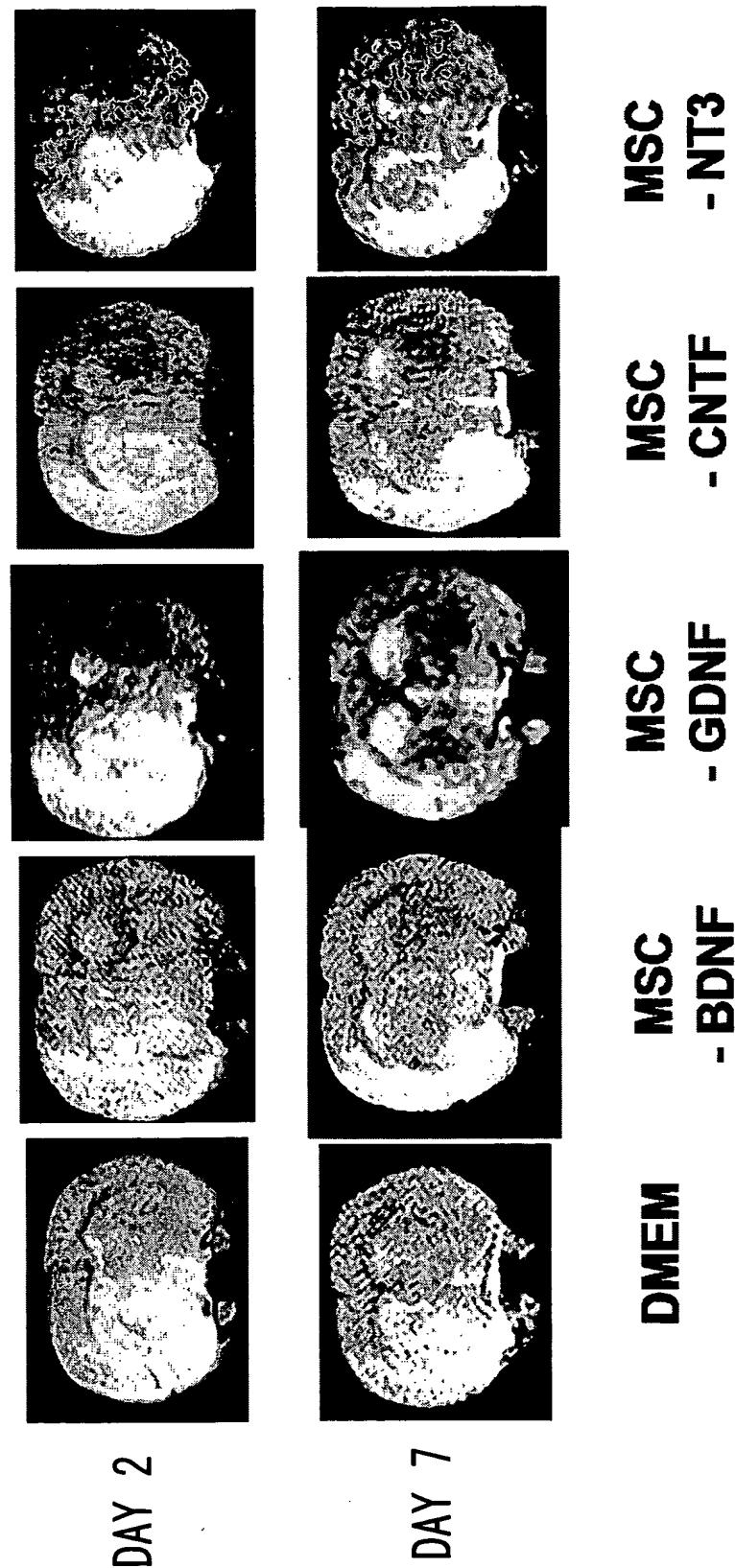
FIG. 41



BEST AVAILABLE COPY

4 5 / 5 6

FIG. 42

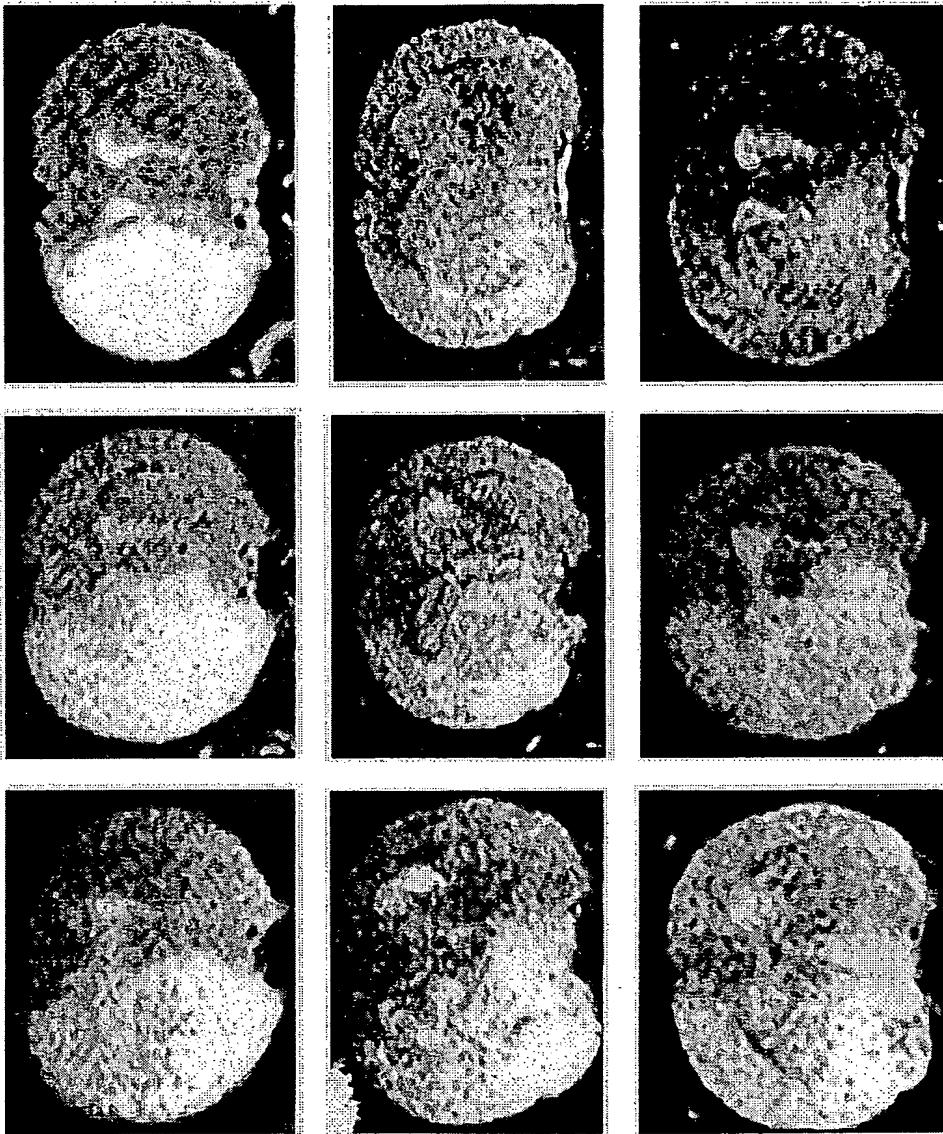


BEST AVAILABLE COPY

46 / 56

FIG. 43

24 HRS LATER 72 HRS LATER 7 DAYS LATER



CONTROL

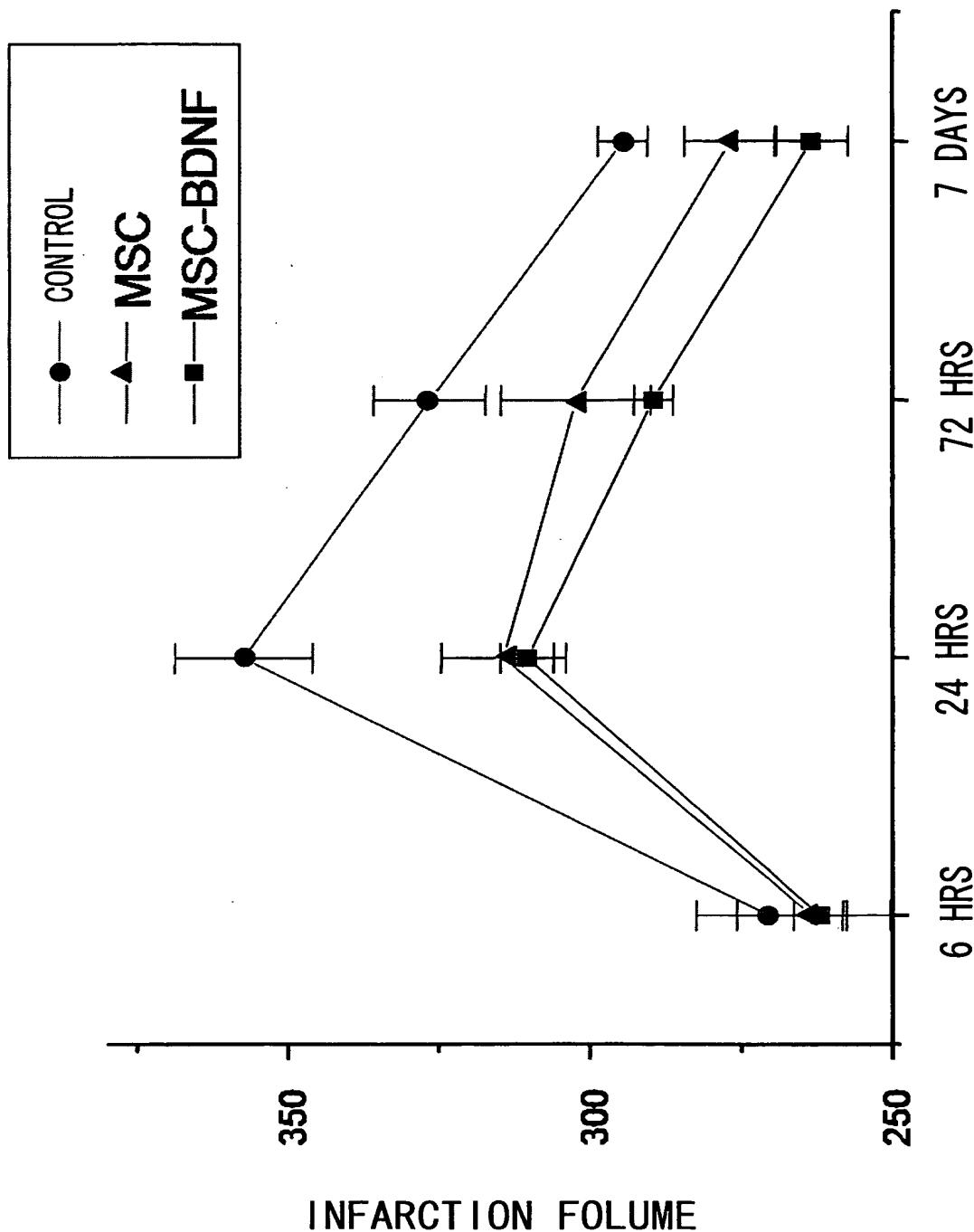
MSC

MSC-BDNF

DOCT AVAILABLE COPY

47 / 56

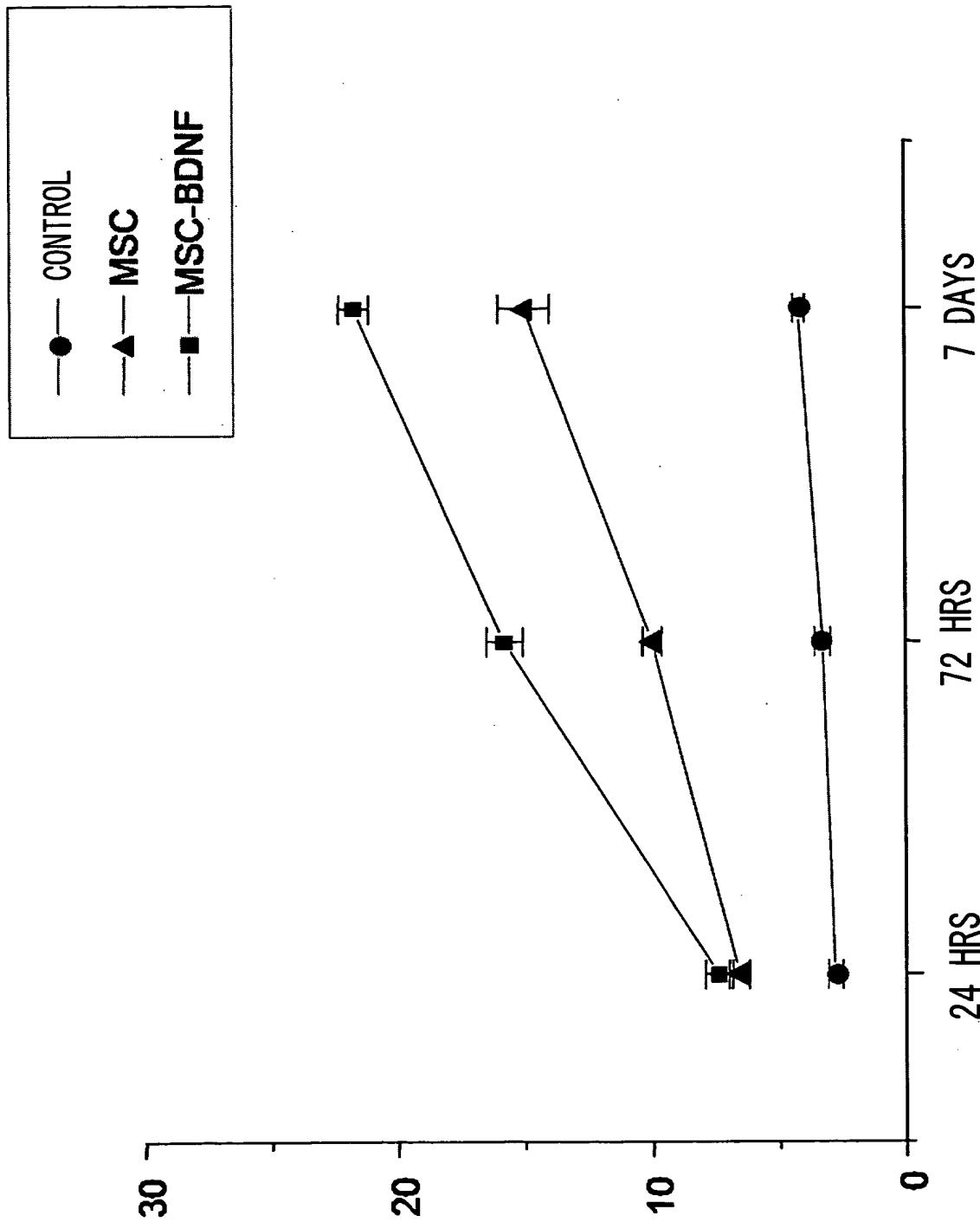
FIG. 44



BEST AVAILABLE COPY

4 8 / 5 6

FIG. 45

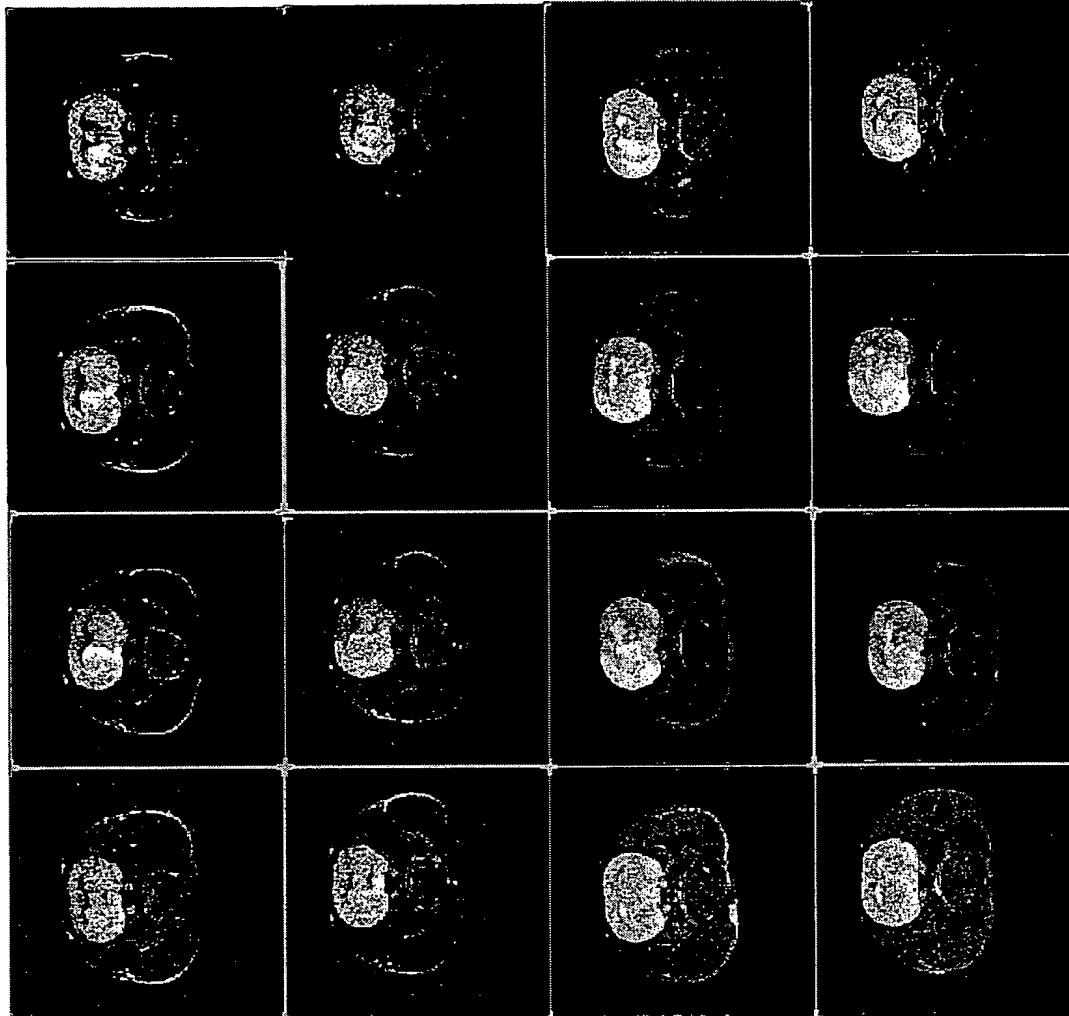


DOES NOT AVAILABLE COPY

4 9 / 5 6

FIG. 46

3 HRS
LATER
24 HRS
LATER
3 DAYS
LATER
7 DAYS
LATER



DWI
($b=1000$)

CONTROL

T₂WI

CONTROL

BEST AVAILABLE COPY

50 / 56

FIG. 47

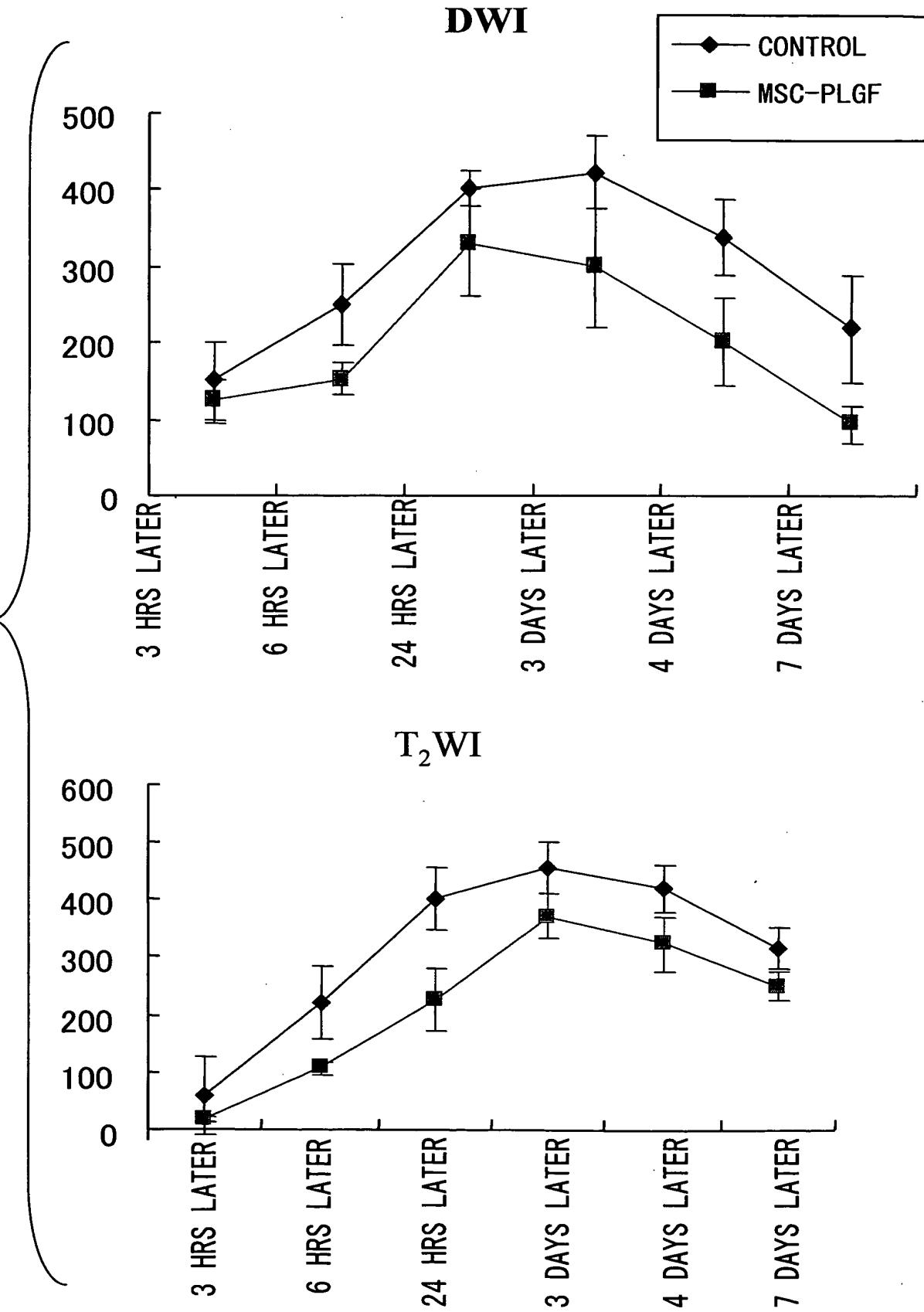
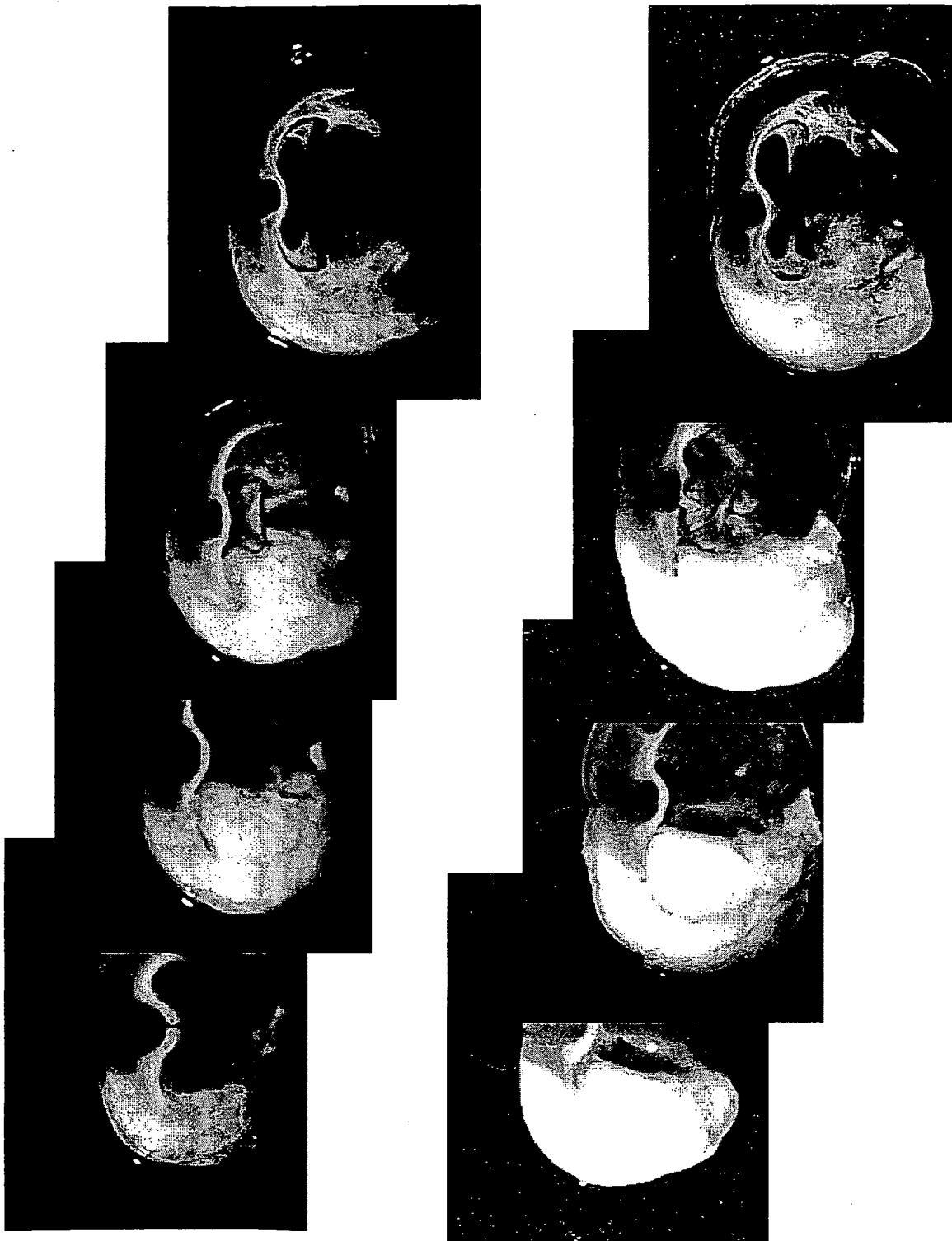


FIG. 48

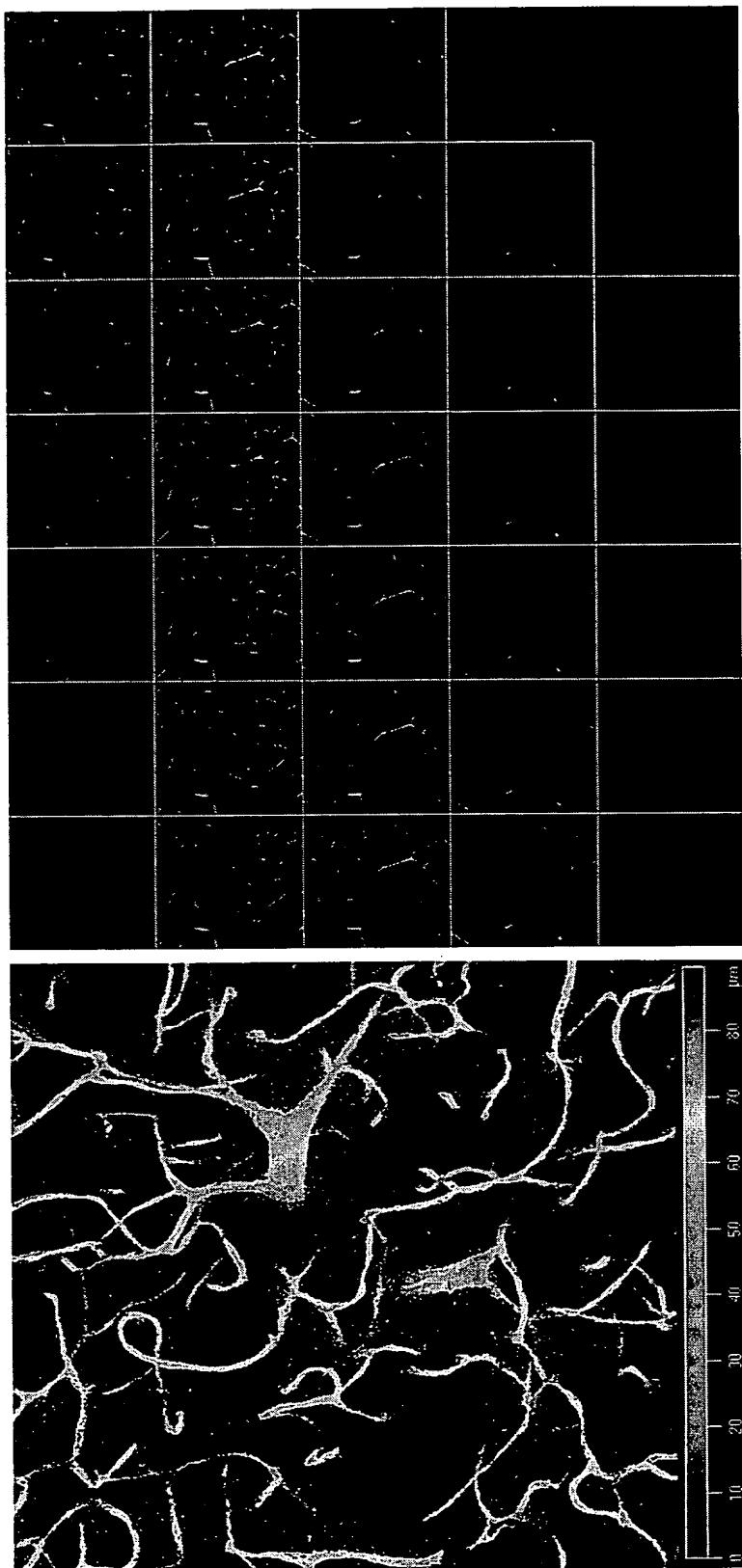


MSC-
PLGF

CONTROL

FIG. 49

FITC
EVANS BLUE

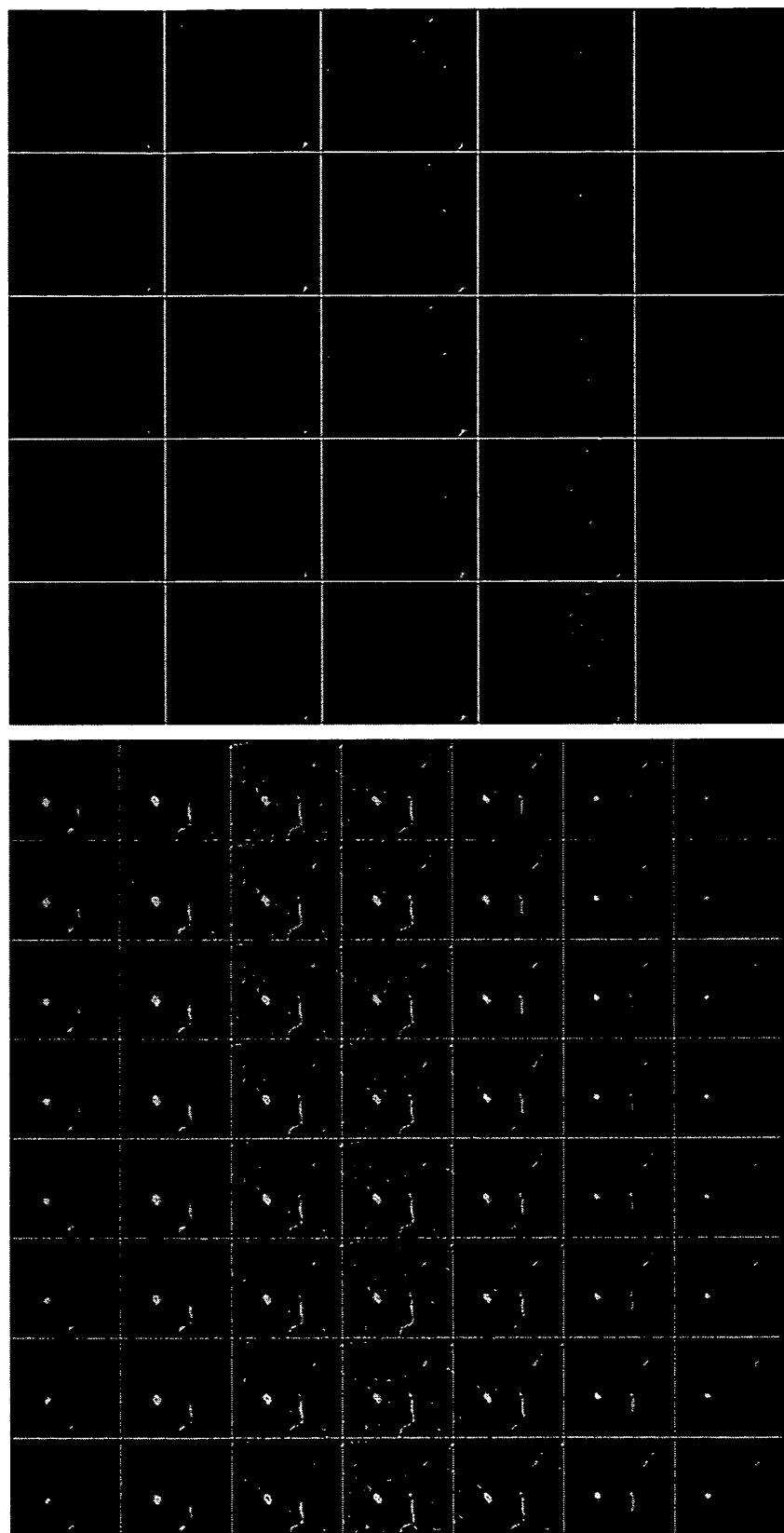


53 / 56

FIG. 50

ANGIOPOLYETIN

CONTROL



BEST AVAILABLE COPY

54 / 56

FIG. 51

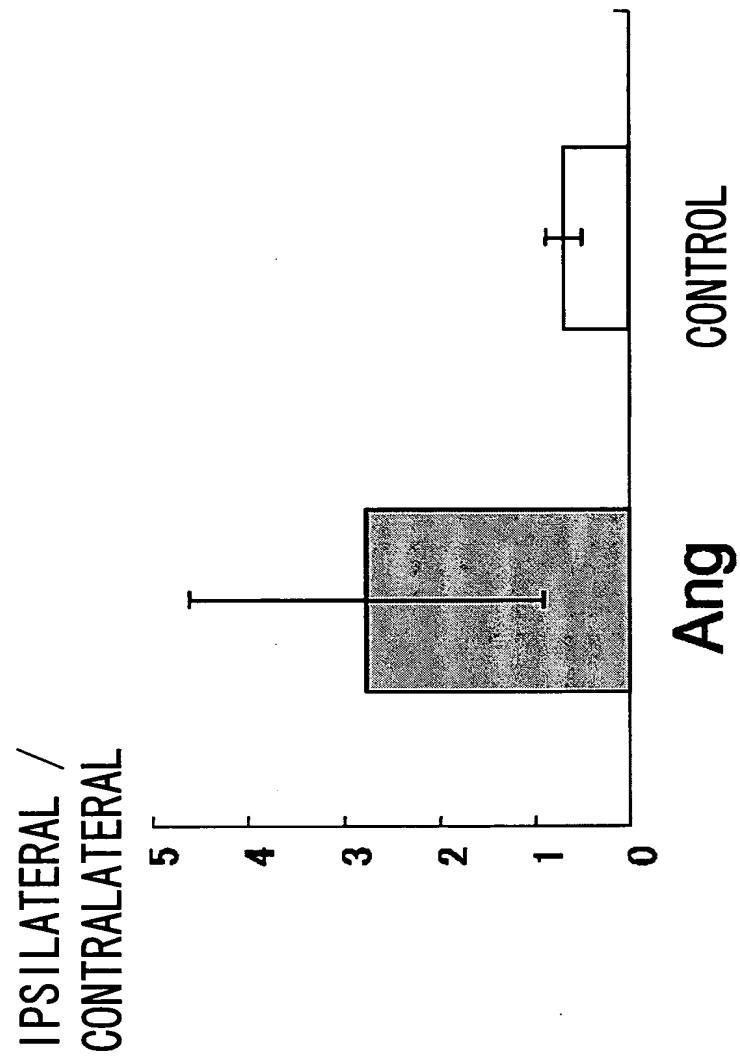
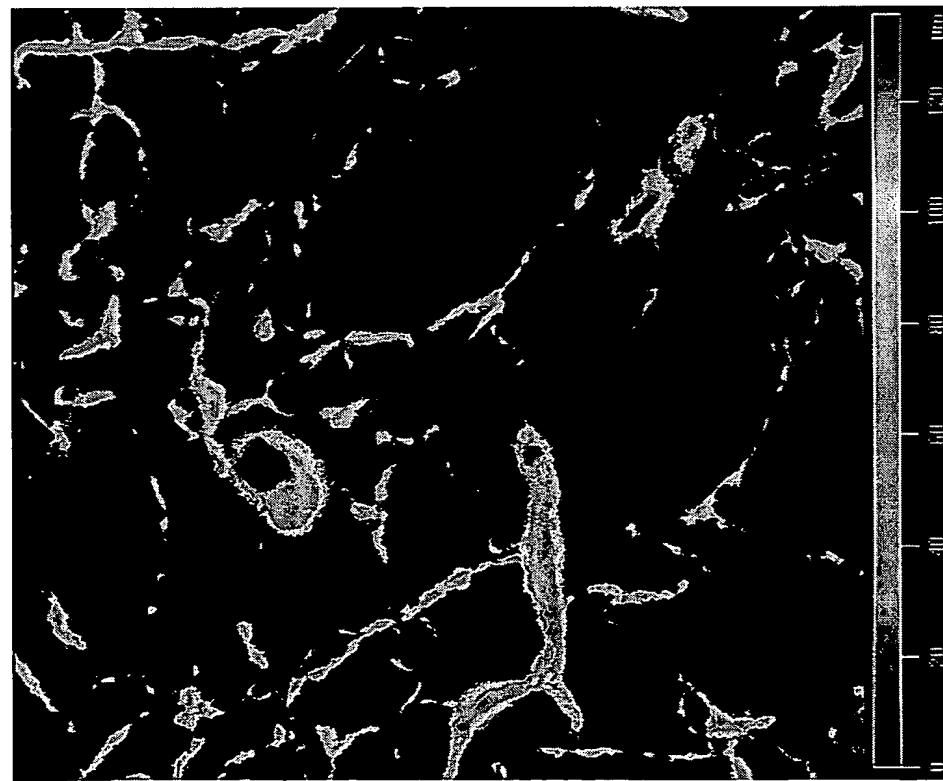
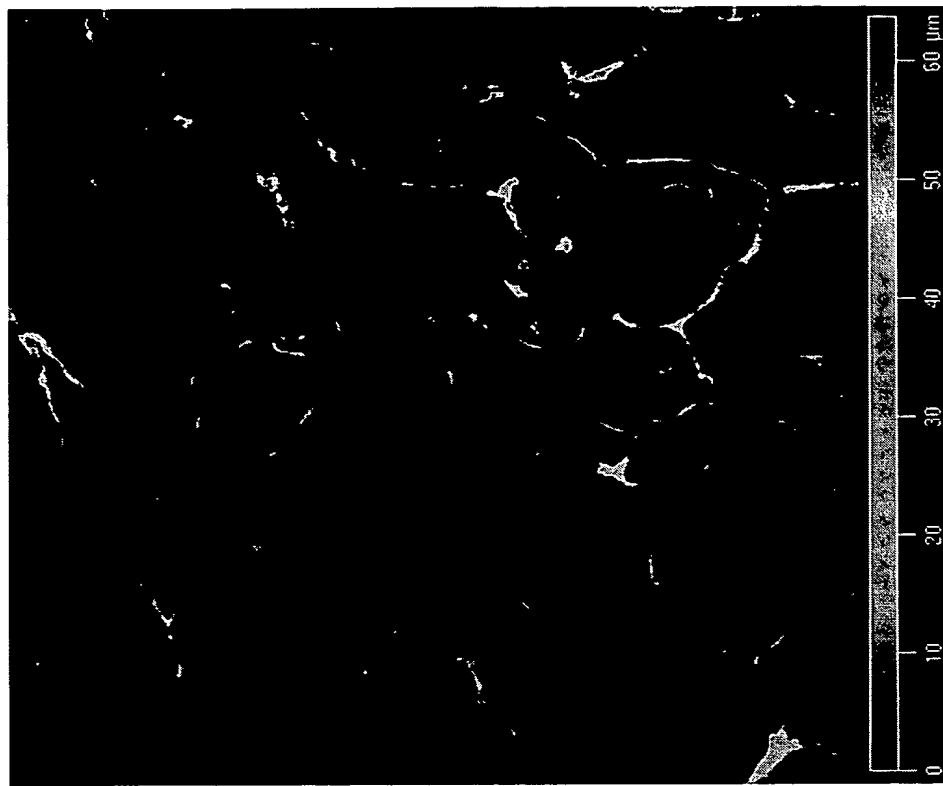


FIG. 52

ANGIOPOETIN

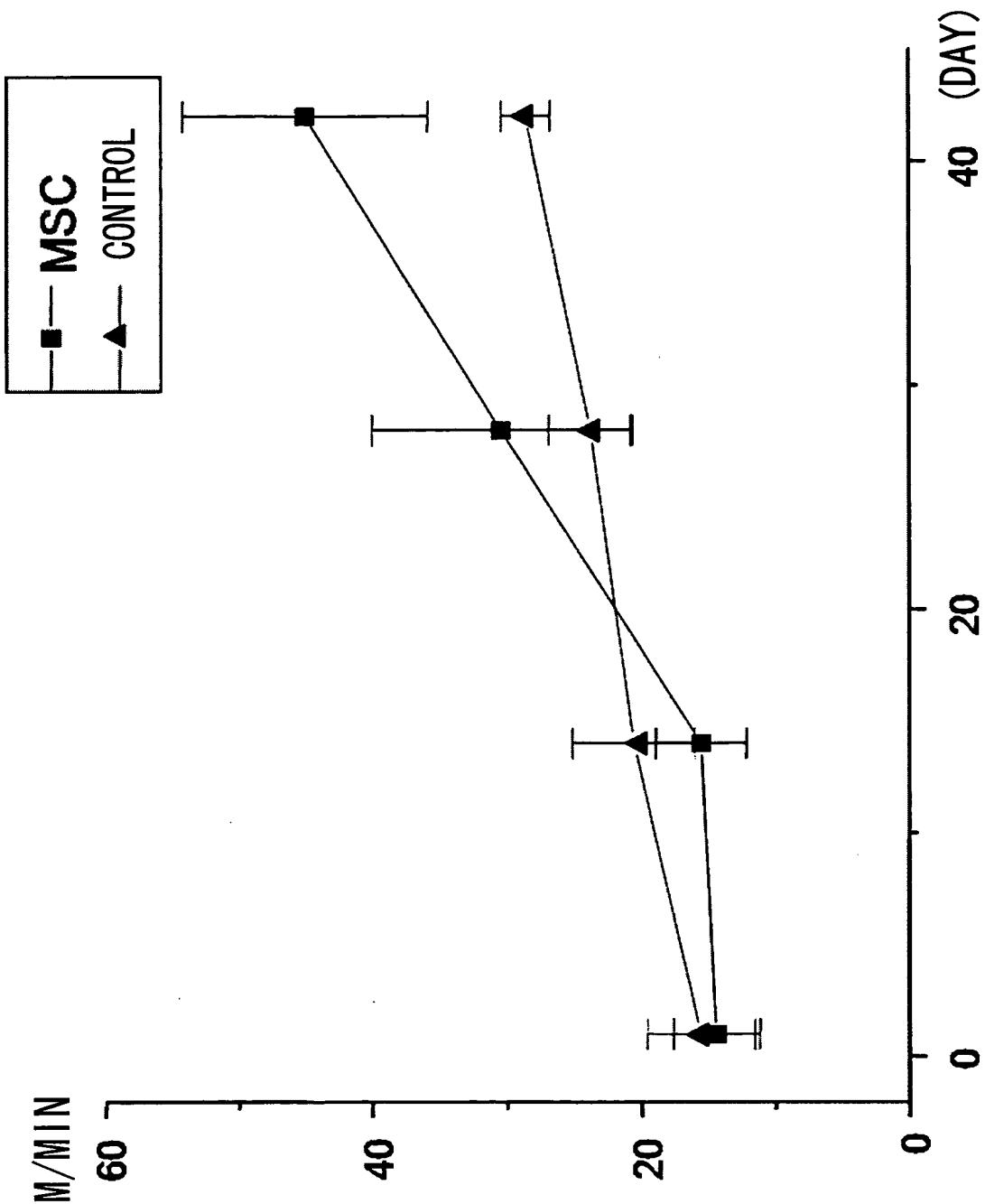
CONTROL



BEST AVAILABLE COPY

5 6 / 5 6

FIG. 53



BEST AVAILABLE COPY